

## **ECAT Information:**

## Overview of Z-scores

The Main, Anticoagulation and Screen survey reports include a page where an overview is given of the Z-scores obtained for the different parameters included in the survey. See example below:



External quality Control for Assays and Tests With a focus on Thrombosis and Haemostasis

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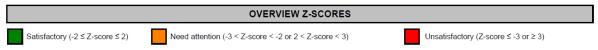
Survey: 2020-M2

Version: 1.0.0

OVERVIEW Z-SCORES						
Satisfactory (-2 ≤ Z-score ≤ 2) Need attention (-3 ≤ Z-score < -2 of		or 2 < Z-score ≤ 3)	Unsatisfactory (Z-score < -3 or > 3)			
Module	Parameter	Sample	Test System	Total	Assay	Method
Thrombophilia - I	Antithrombin activity	20.75	1	-0.71	-0.61	-0.96
		20.75	2	-0.71	-0.61	-0.96
		20.76	1	-0.32	-0.36	-0.31
		20.76	2	-0.47	-0.54	-0.49
Coagulation Factor - I	Factor VIII (clotting activity)	20.79	1	0.61	0.61	0.27
		20.80	1	-1.04	-1.05	-0.43
	Factor IX (clotting)	20.79	1	0.01	0.00	0.03
		20.80	1	0.29	0.29	0.40
	Factor XI	20.79	1	1.09	1.09	1.31
		20.80	1	-0.61	-0.62	-0.43
	Factor XII	20.79	1	-0.69	-0.71	-0.90
	,	20.80	1	2.21	2.22	3.20
Coagulation Factor - II	Factor II	20,81	1	1.60	1.60	1.86
		20.82	1	2.51	2.51	1.99
	Factor V	20.81	1	2.25	2.25	1.67

Recently it was revealed that for the different categories (Satisfactory; Need attention; Unsatisfactory) the Z-scores are not correctly indicated in the legend above the overview table. More specifically, the border between "Need attention" and "Unsatisfactory" is not correctly indicated. In the current legend the category "Need attention" includes the value of -3 or 3. However, the value -3 or 3 should be included in the category "Unsatisfactory".

So, the correct legend should be:



In the Survey Manual 2020, page 23, the categories are correctly indicated:

## Acceptance criteria Z-score

Each participants should carefully evaluate the Z-scores given in the report.

In accordance with ISO/IEC standard 17043:2010 and ISO standard 13528:2015 the following acceptance criteria are used:

-2 ≤ Z-score ≤ 2 : The result is acceptable

-3 < Z-score < -2 or 2 < Z-score < 3 : The result is questionable (warning signal) Z-score ≤ -3 or Z-score ≥ 3 : The result is unacceptable (action signal)

If you have included the wrong Z-score category borders in your own procedures for the evaluation of the ECAT external quality assessment results we kindly ask you to modify your procedures according to the information provided above.