# **ECAT FOUNDATION**

# **External quality Control for Assays and Tests**

With a focus on Thrombosis and Haemostasis

# **REPORT**



SURVEY 2022-P4 PFA 100/200 Labcode 1492

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

Version: 1.0.0

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Date of Issue : 12-January-2023

Survey : 2022-P4

Report : PFA 100/200

#### Note:

In the Survey Manual 2022 detailed information is given regarding the ECAT external quality assessment programme, including the statistical evaluation and explanation of the report.

This Survey Manual 2022 should be considered as an integral part of this survey report.

Please notice the information regarding the homogeneity of samples used and the between-laboratory variation on page 21 of the Survey Manual.

#### **General Information**

#### **Complaints**

Any complaints regarding this survey report should be reported to the ECAT before **March 7th**, **2023**. Complaints received after this date will not be taken into consideration.

### **Exclusion of results**

Results < [value] or > [value] are excluded in the statistical analysis.

When other results are excluded in the statistical analysis, these results are placed between brackets.

Several participants reported comments in numeric result fields (e.g. an error code of the PFA analyser). These comments are placed between brackets. Because of the limited space for "your results" in the report, these comments are not always fully visible.

#### Report results in correct units

Several participants reported haematocrit in percentage. Please use in future surveys for haematocrit the unit: L/L. We have corrected the values to this unit.

This report is authorized by:

Dr. P. Meijer Director

Note: A printed version of the actual Survey Manual is provided to all participants once a year. This manual can also be downloaded from the member section of the ECAT website.

ECAT Foundation

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Appendices are an integral part of the total report.



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

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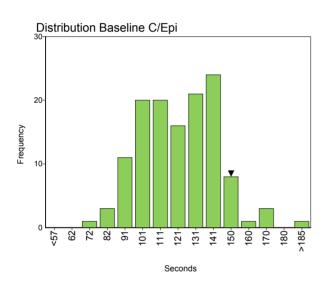
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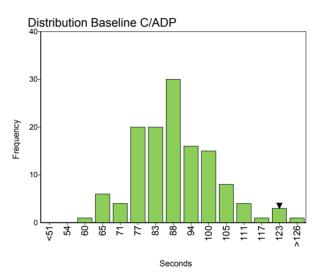
# PFA 100/200

# PFA 100/200

#### Baseline results from donor native blood:

Test Parameter	Unit	n	Mean	Range	Own Result	Own Result	Own Result
Platelet Count	x10º/L	111	248	149 - 457	308		
Mean Platelet Volume	fL	98	9.9	6.9 - 14.2	8.7		
Haematocrit	L/L	111	0.41	0.33 - 0.52	0.42		
VWF:AG	%	49	111	54 - 215			
VWF:RCo	%	21	101	69 - 185			
VWF:Activity	%	33	115	60 - 194			
VWF:CBA	%	9	95	77 - 116			
FVIII:C	%	45	134	75 - 264			
Baseline C/Epi	seconds	129	121	70 - 210	149		
Baseline C/ADP	seconds	129	88	62 - 131	123		





# Classification baseline results from donor native blood:

				No			
Test Parameter	Normal	Borderine	Abnormal	Classification	Own Result	Own Result	Own Result
Platelet Count	112	2	0	1	Normal		
Mean Platelet Volume	88	4	6	2	Normal		
Haematocrit	107	3	2	0	Normal		
VWF:AG	47	1	1	0			
VWF:RCo	20	0	1	0			
VWF:Activity	33	0	0	0			
VWF:CBA	9	0	0	0			
FVIII:C	38	2	4	1			
Baseline C/Epi	127	2	0	1	Normal		
Baseline C/ADP	126	4	0	0	Normal		

## Comments:

The following participants reported deviating results which were excluded in the statistical evaluation:

110 - (Platelet Count) : 220.000 x 10^9/L

1024 - (Haematocrit) : 416 L/L 1172 - (Mean Platelet Volume) : 90.6 fL

1352 - (Platelet Count) : 320.000 x 10^9/L

4501 - (Mean Platelet Volume) : 95.2 fL

On the basis of the baseline test results reported by all participants, it can be concluded that almost in all cases a normal donor was used.



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

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### PFA 100/200

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Sample No 22.233

Sample Details Normal PFA sample

Prior Use None
Unit seconds
Expiry Date 26-August-2022

Homogeneity - Homogeneity Parameter -

Number of Participants 157

Number of Responders 141 Response Rate 90 %

Comments Two participants reported error codes for the measurement with the C/Epi cartridge.

Furthermore, three participants reported a result above the upper limit of the measuring range [>

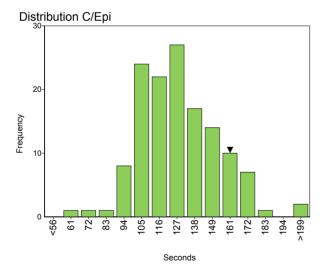
(value)] for the C/Epi and/or C/ADP cartridge.

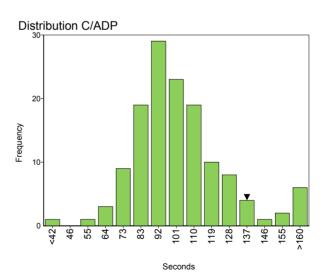
### Classification for sample 22.233:

Test Parameter	Normal	Borderine	Abnormal	Classification	Own Result	Own Result	Own Result
C/Epi	117	6	14	1	Borderline		
C/ADP	103	13	19	1	Borderline		

#### Sample results:

	Parameter	n	assigned value	Uncert.	CV (%)	range	your result	z-score	your result	z-score	your result	z-score
Ī	C/Epi	136	127	2.6	18.8	56 - 202	163	1.49				
Ī	C/ADP	136	101	2.1	19.5	33 - 295	136	1.79				





#### **Final Conclusion:**

	N
Normal	104
Borderline	14
Mild Defect	8
Severe Defect	1
Aspirin-like Defect	5
Unable to Interpret	3
Test Failure	5
Other	2
No Conclusion	2

Borderline	

## **Conclusion Comments:**

About 78% of the participants correctly classified this sample as normal. Surprisingly, about 10% of the participants observed a defect in this sample and also about 10% of the participant classified the sample as borderline.

There were also some participants that observed a test failure or were not able to interpret the results or did not give a conclusion.



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### PFA 100/200

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Version:

1.0.0

Sample No 22.234

Sample Details PFA sample with a mild defect

Prior Use None
Unit seconds
Expiry Date 26-August-2022

Homogeneity 19.7 % Homogeneity Parameter C/Epi

For any method used for the measurement of this parameter with a CV ≤ 65.7% the criterion for homogeneity could not be met and the Z-scores should be interpreted with caution. See for further

details the paragraph on the statistical evaluation in the Survey Manual.

Number of Participants 157

Number of Responders 141 Response Rate 90 %

Comments A number of participants reported error codes for the measurment with the C/Epi and/or C/ADP

cartridge.

Furthermore, a substantial number of participants reported a results above the upper limit of the

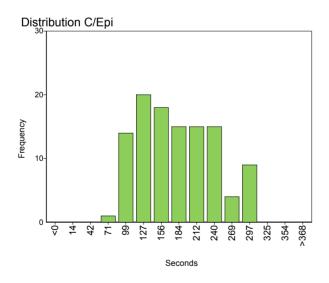
measuring range [> (value)] for the C/Epi and/or C/ADP cartridge.

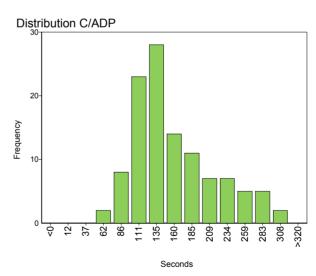
#### Classification for sample 22.234:

				No			
Test Parameter	Normal	Borderine	Abnormal	Classification	Own Result	Own Result	Own Result
C/Epi	39	9	88	3	Abnormal		
C/ADP	30	4	102	5	Abnormal		

#### Sample results:

Parameter	n	assigned value	Uncert.	CV (%)	range	your result	z-score	your result	z-score	your result	z-score
C/Epi	111	180	7.4	34.8	66 - 300	>300					
C/ADP	113	153	6.5	36.2	65 - 300	>300					





#### **Final Conclusion:**

	N
Normal	20
Borderline	4
Mild Defect	27
Severe Defect	53
Aspirin-like Defect	13
Unable to Interpret	7
Test Failure	6
Other	7
No Conclusion	7

Severe Defect	

#### **Conclusion Comments:**

The sample distributed was intended to demonstrate results according to a mild defect. However, a hetergeneous pattern in the final conclusion was observed. From the participants who gave a final conclusion about 23% reported a mild defect, 45% reported a severe defect and 11% reported an aspirin-like defect. In addition, 17% of participants reported this sample to be normal.

There were also several participants that observed a test failure or were not able to interpret the results or did not give a conclusion.



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