

# **ECAT FOUNDATION**

**External quality Control for Assays and Tests**

**With a focus on Thrombosis and Haemostasis**

## **REPORT**



### **SURVEY 2025-L3 Lupus Anticoagulant Labcode 1492**

Copyright © 2025  
ECAT Foundation

Date of Issue : 24-October-2025

Survey : 2025-L3

Report : Lupus Anticoagulant

**Note:**

In the Survey Manual 2025 detailed information is given regarding the ECAT external quality assessment programme, including the statistical evaluation and explanation of the report.

This Survey Manual 2025 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 in the paragraph on the statistical evaluation of the Survey Manual.

**General Information****Exclusion of results**

Results < [value] or > [value] are excluded from the statistical analysis. When other results (e.g., deviating results) are excluded from the statistical analysis, these results are placed between brackets.

**Lupus Anticoagulant**

When selecting the unit seconds; all results should be reported in seconds and not partly in ratios; e.g., the result for the ECAT sample, the result for normal plasma and the result for MRI.

**Antiphospholipid Antibodies**

Please be aware of the selection of the correct unit for the method group "IL Acustar / INOVA Quanta Flash". Since there is a difference in the order of magnitude between the results of the "IL Acustar / INOVA Quanta Flash" method group and the other methods, it is expressed in the report as CU/mL instead of U/mL.

**Complaints**

Any complaints regarding this survey report should be reported to the ECAT before **December 16th, 2025**. Complaints received after this date will not be taken into consideration.

This report is authorized by:

Dr. M.J. van Essen-Hollestelle  
Programme Expert

**Note:** The current Survey Manual can be downloaded from the 'Participant Area' of the ECAT website. Login and select the option 'View Documents'.

ECAT Foundation

Director: Dr. P. Meijer  
ECAT Office  
P.O. Box 107  
2250 AC Voorschoten, The Netherlands  
phone +31 (0) 71 3030 910; fax + 31 (0) 71 3030 919  
E-mail: [info@ecat.nl](mailto:info@ecat.nl)  
Website: [www.ecat.nl](http://www.ecat.nl)  
VAT number: NL802836872B01

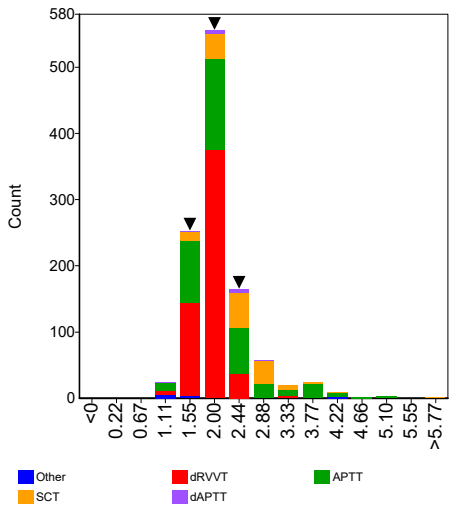
Registration number with the Chamber of Commerce (KvK) Gouda : 41174102  
General terms of delivery are applicable to all our services.

All rights reserved. No part of this report may be reproduced, stored in a retrieval system, or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission from the ECAT Foundation.  
Appendices are an integral part of the total report.

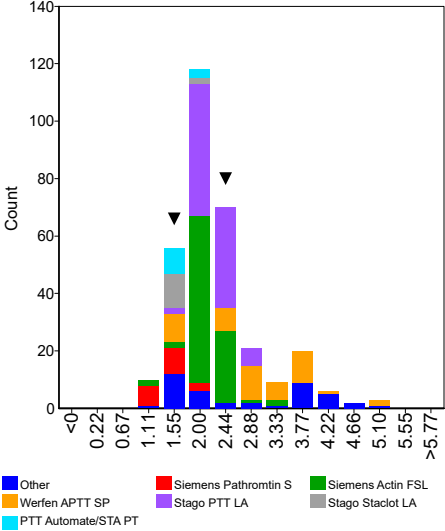
## External quality Control for Assays and Tests With a focus on Thrombosis and Haemostasis

Ratio Normal Plasma	n	assigned value	CV (%)	Range	Test System	Panel 1	Z-score	Panel 2	Z-score	Panel 3	Z-score
<b>APTT</b>	371	2.09	24.8	1.09 - 5.25	1	1.35	-1.43	2.24	0.28		
Hyphen-Biomed Cephen LS	9	3.82		3.03 - 5.07							
Precision Biologic CRYOcheck Hex LA Star	5	1.67		1.41 - 1.76							
Roche aPTT Lupus	5	2.11		1.64 - 4.18							
Siemens Actin FS	7	4.39		3.58 - 4.56							
Siemens Actin FSL	90	2.12	10.0	1.25 - 3.55	1			2.24	0.54		
Siemens Pathromtin SL	19	1.39	14.2	1.09 - 2.09	1	1.35	-0.21				
Stago PTT Automate/STA PTT	12	1.71	5.5	1.51 - 1.94							
Stago PTT LA	89	2.23	12.3	1.47 - 2.94							
Stago StacLOT LA	14	1.53	10.4	1.37 - 1.91							
Werfen APTT SP	50	2.89	33.4	1.49 - 5.25							
Werfen HemosIL SynthAsil	42	1.73	6.0	1.34 - 2.07							
Werfen MixCon	14	1.59	8.4	1.15 - 1.78							
<b>dAPTT</b>	13	2.17	16.0	1.09 - 2.75							
Stago PTT LA	8	2.32		2.01 - 2.75							
<b>dRVVT</b>	564	1.90	10.7	1.00 - 3.51	1					1.79	-0.56
Hyphen Biomed Hemoclot LA-S	6	2.25		2.04 - 2.61							
Precision Biologic LA check	6	1.98		1.75 - 2.40							
Roche Lupus S	10	1.79	3.1	1.66 - 1.98							
Siemens LA1 screen	231	1.91	11.3	1.00 - 2.59	1					1.79	-0.56
Stago DRVVT screen	76	1.77	10.0	1.35 - 2.29							
Technoclone LA Screen	6	2.12		1.75 - 2.38							
Werfen HemosIL dRVVT screen	220	1.93	9.2	1.13 - 3.51							
<b>PT</b>	7	1.27		1.13 - 1.72							
<b>SCT</b>	155	2.41	20.9	1.29 - 7.13							
Werfen SCT screen	154	2.40	20.8	1.29 - 4.38							

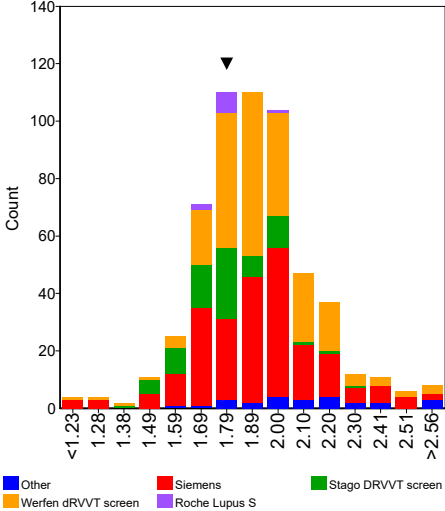
### Assays



### APTT



### DRVVT

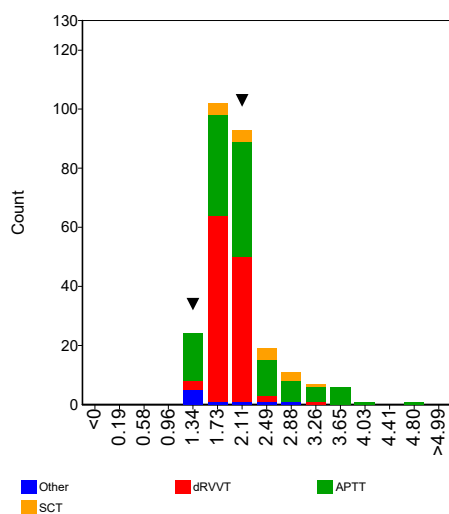


## Lupus Anticoagulant

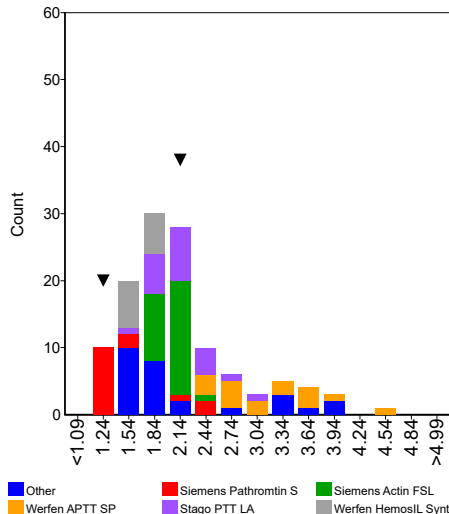
## Screening

Ratio MRI	n	assigned value	CV (%)	Range	Test System	Panel 1	Z-score	Panel 2	Z-score	Panel 3	Z-score
<b>APTT</b>	121	2.06	25.8	1.29 - 4.66	1	1.32	-1.40	2.14	0.15		
Siemens Actin FSL	28	2.04	6.9	1.71 - 2.30	1			2.14	0.69		
Siemens Pathromtin SL	15	1.39	7.2	1.29 - 2.44	1	1.32	-0.71				
Stago PTT Automate/STA PTT	6	1.68		1.58 - 1.86							
Stago PTT LA	21	2.14	14.6	1.65 - 2.94							
Werfen APTT SP	16	3.14	19.7	2.48 - 4.66							
Werfen HemosIL SynthAsil	13	1.72	7.5	1.55 - 1.93							
<b>dRVVT</b>	118	1.90	10.4	1.37 - 3.24	1					2.08	0.92
Roche Lupus S	6	1.83		1.64 - 2.11							
Siemens LA1 screen	67	1.95	9.5	1.37 - 2.55	1					2.08	0.71
Stago DRVVT screen	13	1.75	9.7	1.41 - 1.95							
Werfen HemosIL dRVVT screen	28	1.85	8.3	1.57 - 3.24							
<b>PT</b>	6	1.25		1.23 - 1.62							
<b>SCT</b>	16	2.27	19.0	1.68 - 3.22							
Werfen SCT screen	16	2.27	19.0	1.68 - 3.22							

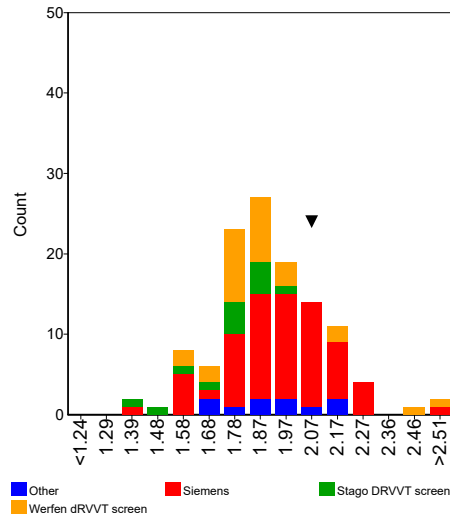
### Assays



### APTT



### DRVVT



### Comments

Several participants selected the wrong unit, e.g., ratio while the result was likely to be in seconds. Other participants reported their result for the ECAT plasma in seconds, while the result for their reference plasma or the mean of the reference interval was reported as a ratio or as delta seconds. In all these cases, the ratio between the ECAT plasma and the laboratorie's own reference plasma and/or the mean of the reference interval could not be correctly calculated. Therefore all these results were excluded from the statistical analysis.

The vast majority of screening tests performed (99%), were classified as elevated.

In general, comparable results were observed for the ratio ECAT plasma over Normal Plasma and ratio ECAT plasma over Mean Reference Interval (MRI).

### Lupus Anticoagulant

### Mixing (screening)

**Sample No** 25.186

**Sample Details** Plasma positive for Lupus Anticoagulant (LA Ratio approx. 1.6)

**Prior Use** Prior Use: None

**Unit** Ratio

**Expiry Date** 31-May-2027

**Homogeneity** 0.5 % **Homogeneity Parameter** LA ratio

For any method used for the measurement of this parameter with a **CV ≤ 1.7%** 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** 639

**Number of Responders** 426 **Response Rate** 67 %

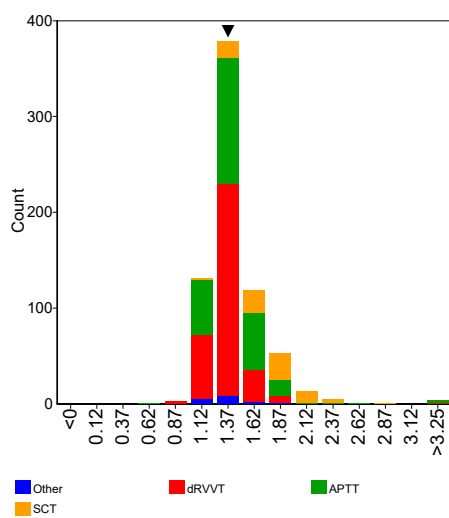
Assay	Elevated	Not elevated	Borderline	No Classification
APTT	253	39	0	8
dAPTT	10	1	0	1
dPT	2	1	0	0
dRVVT	308	39	0	13
KCT	2	0	0	0
PNP	0	0	0	0
PT	1	2	0	1
SCT	86	4	0	1

Assay	Your classification							
	Mixing 1			Mixing 2			Mixing 3	
		TS2	TS3					
APTT		Not elevated						
dAPTT								
dPT								
dRVVT			Elevated					
KCT								
PNP								
PT								
SCT								

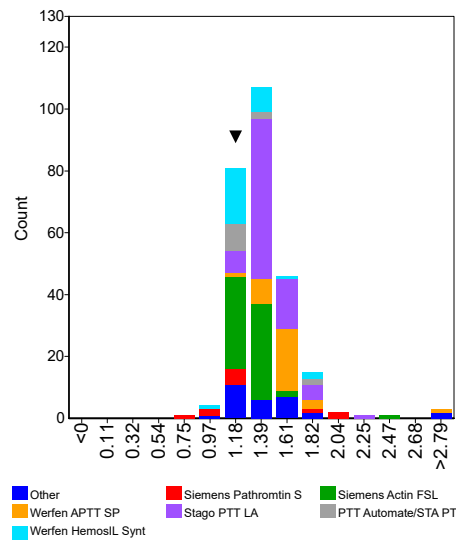
### Ratio Normal Plasma

	n	assigned value	CV (%)	Range	Test System	Panel 1	Z-score	Panel 2	Z-score	Panel 3	Z-score
<b>APTT</b>	271	1.41	14.6	0.70 - 4.56	1			1.28	-0.59		
Hyphen-Biomed Cephen LS	10	1.75	5.0	1.56 - 1.91							
Siemens Actin FS	5	1.31		1.12 - 4.56							
Siemens Actin FSL	64	1.31	7.2	1.10 - 2.57	1			1.28	-0.26		
Siemens Pathromtin SL	11	1.29	38.7	0.70 - 2.06							
Stago PTT Automate/STA PTT	13	1.30	8.1	1.21 - 1.87							
Stago PTT LA	81	1.44	9.7	1.14 - 2.27							
Werfen APTT SP	33	1.57	7.2	1.23 - 3.89							
Werfen HemosIL SynthAsil	30	1.28	9.8	1.01 - 1.78							
Werfen MixCon	9	1.57		1.11 - 1.71							
<b>dAPTT</b>	9	1.39		1.32 - 1.65							
Stago PTT LA	8	1.38		1.32 - 1.65							
<b>dRVVT</b>	335	1.35	9.3	0.79 - 3.43	1					1.25	-0.74
Roche Lupus S	7	1.16		0.98 - 1.30							
Siemens LA1 screen	161	1.33	8.3	0.79 - 3.43	1					1.25	-0.68
Stago DRVVT screen	46	1.29	8.0	1.12 - 1.82							
Werfen HemosIL dRVVT screen	108	1.42	9.7	0.98 - 2.00							
<b>SCT</b>	87	1.74	17.2	1.20 - 2.92							
Werfen SCT screen	86	1.74	17.4	1.20 - 2.92							

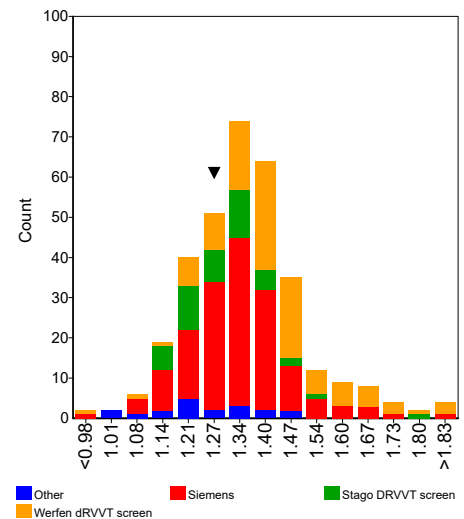
### Assays



### APTT

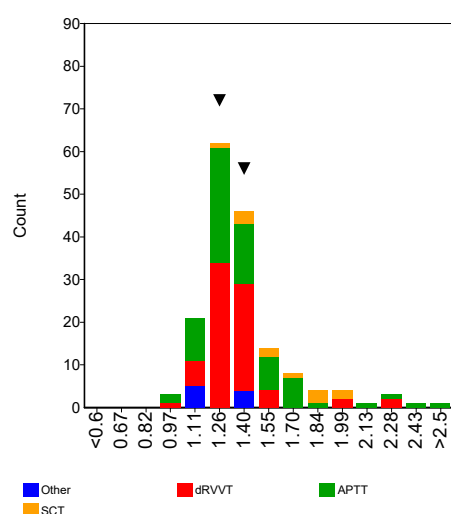
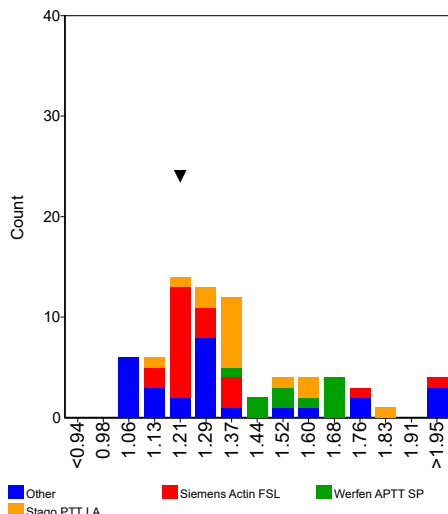
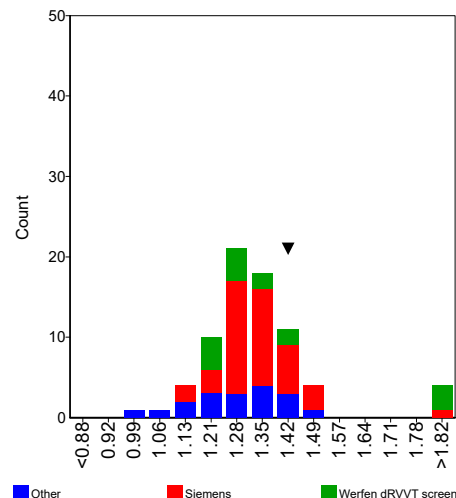


### DRVVT



**Lupus Anticoagulant**
**Mixing (screening)**

Ratio MRI	n	assigned value	CV (%)	Range	Test System	Panel 1	Z-score	Panel 2	Z-score	Panel 3	Z-score
<b>APTT</b>	73	1.36	16.3	1.02 - 2.60	1			1.23	-0.57		
Siemens Actin FSL	21	1.27	6.1	1.14 - 2.60	1			1.23	-0.47		
Siemens Pathromtin SL	9	1.06		1.02 - 2.40							
Stago PTT Automate/STA PTT	5	1.28		1.21 - 1.29							
Stago PTT LA	15	1.39	10.8	1.16 - 1.85							
Werfen APTT SP	10	1.56	8.3	1.36 - 1.70							
Werfen HemosIL SynthAsil	5	1.28		1.16 - 1.50							
<b>dRVVT</b>	74	1.32	8.5	0.97 - 2.26	1					1.46	1.23
Roche Lupus S	6	1.13		0.97 - 1.39							
Siemens LA1 screen	41	1.33	7.4	1.14 - 1.97	1					1.46	1.29
Stago DRVVT screen	8	1.31		1.18 - 1.45							
Werfen HemosIL dRVVT screen	15	1.35	11.7	1.20 - 2.26							
<b>SCT</b>	12	1.64	17.5	1.32 - 2.02							
Werfen SCT screen	12	1.64	17.5	1.32 - 2.02							

**Assays**

**APTT**

**DRVVT**

**Comments**

Several participants selected the wrong unit, e.g., ratio while the result was likely to be in seconds. Other participants reported their result for the ECAT plasma in seconds, while the result for their reference plasma or the mean of the reference interval was reported as a ratio. In all these cases, the ratio between the ECAT plasma and the laboratorie's own reference plasma and/or the mean of the reference interval could not be correctly calculated. Therefore all these results were excluded from the statistical analysis.

The majority of mixing tests performed (89%), were classified as elevated.

In general, comparable results were observed for the ratio ECAT plasma over Normal Plasma and ratio ECAT plasma over Mean Reference Interval (MRI).

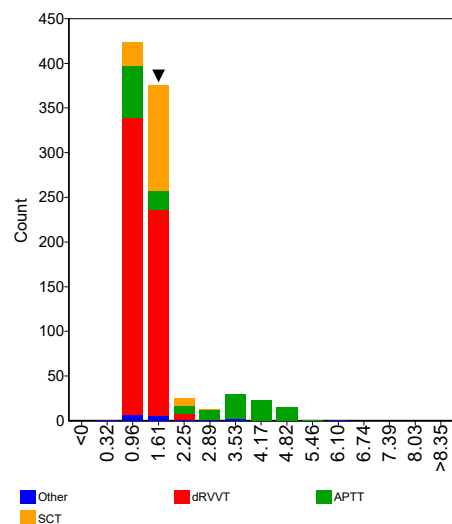




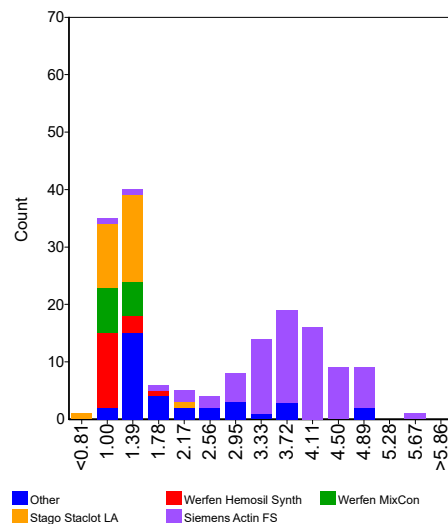
### Ratio Normal Plasma

	n	assigned value	CV (%)	Range	Test System	Panel 1	Z-score	Panel 2	Z-score	Panel 3	Z-score
<b>APTT</b>	167	2.51	60.5	0.69 - 5.54							
Hyphen Biomed Cephen	6	2.70		1.77 - 4.88							
Precision Biologic CRYOcheck Hex LA Cor	7	1.21		1.16 - 4.78							
Siemens Actin FS	74	3.80	18.0	1.08 - 5.54							
Stago PTT LA	6	1.92		1.40 - 3.87							
Stago Staclot LA	28	1.22	11.2	0.69 - 1.99							
Werfen Hemosil SynthAFax	17	1.15	4.5	0.87 - 1.70							
Werfen MixCon	14	1.19	7.5	1.07 - 1.58							
<b>dAPTT</b>	8	1.58		1.14 - 6.31							
<b>dPT</b>	5	1.70		1.15 - 3.20							
<b>dRVVT</b>	568	1.27	8.4	0.90 - 2.23	1					1.30	0.30
Hyphen Biomed Hemoclot LA-C	6	1.79		1.67 - 2.04							
Precision Biologic LA sure	5	1.45		1.24 - 2.21							
Roche Lupus C	10	1.35	6.8	1.21 - 1.48							
Siemens LA2 confirmation	233	1.29	7.6	1.00 - 1.64	1					1.30	0.10
Stago DRVVT Confirm	74	1.25	6.3	1.06 - 1.68							
Technoclone LA Confirm	6	1.32		1.21 - 1.48							
Werfen Hemosil dRVVT confirm	227	1.24	8.6	0.90 - 1.95							
<b>PNP</b>	6	1.11		0.46 - 1.40							
<b>SCT</b>	154	1.46	12.8	0.94 - 2.67							
Werfen Hemosil SCT confirm	153	1.46	12.6	0.94 - 2.67							

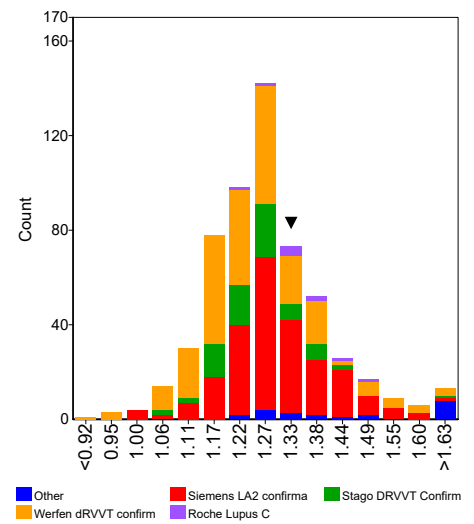
### Assays



### APTT



### DRVVT

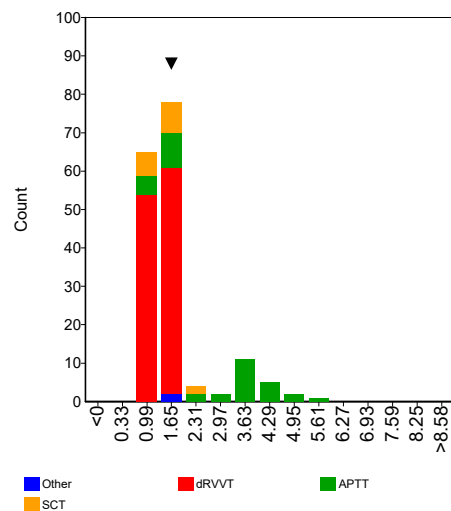


## Lupus Anticoagulant

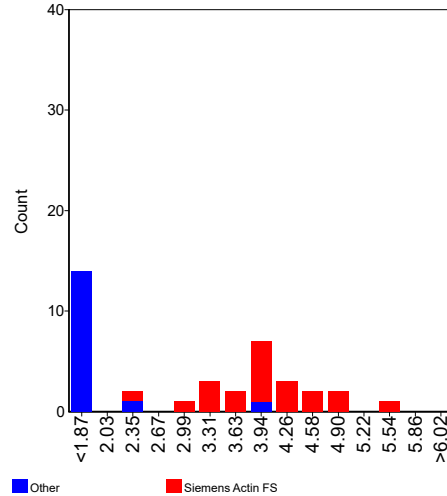
## Confirmation

Ratio MRI	n	assigned value	CV (%)	Range	Test System	Panel 1	Z-score	Panel 2	Z-score	Panel 3	Z-score
<b>APTT</b>	37	2.91	53.1	1.06 - 5.55							
Siemens Actin FS	21	3.94	17.6	2.28 - 5.55							
Stago Staclot LA	7	1.27		1.11 - 2.31							
<b>dRVVT</b>	114	1.33	10.0	1.01 - 1.92	1					1.60	1.99
Roche Lupus C	5	1.41		1.28 - 1.46							
Siemens LA2 confirmation	66	1.37	10.4	1.09 - 1.71	1					1.60	1.60
Stago DRVVT Confirm	13	1.26	5.4	1.01 - 1.35							
Werfen HemosIL dRVVT confirm	27	1.28	8.6	1.12 - 1.92							
<b>SCT</b>	16	1.44	14.2	1.23 - 2.13							
Werfen HemosIL SCT confirm	16	1.44	14.2	1.23 - 2.13							

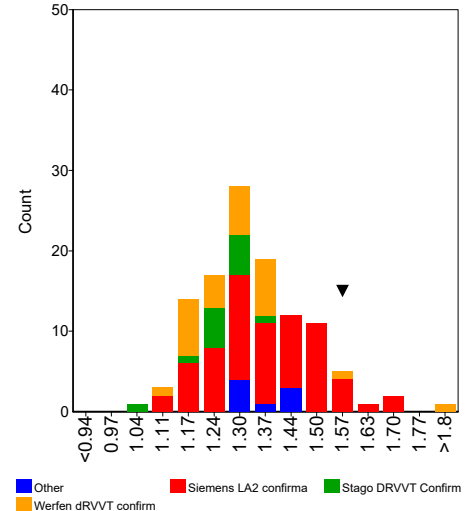
## Assays



## APTT



## DRVVT



## Comments

Several participants selected the wrong unit, e.g., ratio while the result was likely to be in seconds, or vice versa. Other participants reported their result for the ECAT plasma in seconds, while the result for their reference plasma or the mean of the reference interval was reported as a ratio, or vice versa. In all these cases, the ratio between the ECAT plasma and the laboratory's own reference plasma and/or the mean of the reference interval could not be correctly calculated. Several participants reported also a confirmation result in Delta Seconds. However the difference in clotting time between the screen and confirmation test (or reagent 1 and reagent 2) should be reported in the interpretation section. All these results were excluded from the statistical analysis.

The majority of confirmation tests performed (84%), were classified as elevated.

In general, comparable results were observed for the ratio ECAT plasma over Normal Plasma and ratio ECAT plasma over Mean Reference Interval (MRI).

**Lupus Anticoagulant**
**Mixing (confirm)**

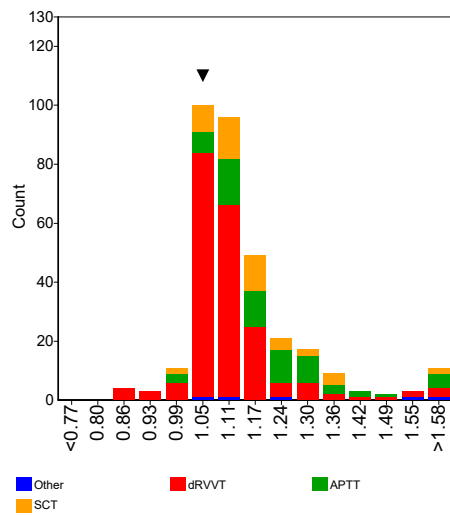
<b>Sample No</b>	25.186		
<b>Sample Details</b>	Plasma positive for Lupus Anticoagulant (LA Ratio approx. 1.6)		
<b>Prior Use</b>	Prior Use: None		
<b>Unit</b>	Ratio		
<b>Expiry Date</b>	31-May-2027		
<b>Homogeneity</b>	0.5 %	<b>Homogeneity Parameter</b>	LA ratio
For any method used for the measurement of this parameter with a <b>CV ≤ 1.7%</b> 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.			
<b>Number of Participants</b>	639		
<b>Number of Responders</b>	230	<b>Response Rate</b>	36 %

Assay	Elevated	Not elevated	Borderline	No Classification
APTT	39	33	0	5
dAPTT	7	0	0	1
dPT	0	0	0	0
dRVVT	78	131	0	12
PNP	1	0	0	0
SCT	17	35	0	1

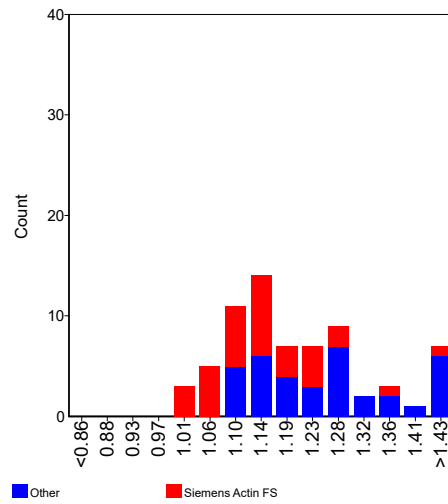
Assay	Your classification								
	Mixing 1			Mixing 2			Mixing 3		
			TS3						
APTT									
dAPTT									
dPT									
dRVVT			Not elevated						
PNP									
SCT									

Ratio Normal Plasma	n	assigned value	CV (%)	Range	Test System	Panel 1	Z-score	Panel 2	Z-score	Panel 3	Z-score
<b>APTT</b>	69	1.20	10.4	0.99 - 4.30							
Siemens Actin FS	33	1.14	8.4	0.99 - 1.67							
Werfen Hemosil SynthAFax	5	1.16		1.12 - 1.36							
Werfen MixCon	8	1.15		1.08 - 1.78							
<b>dRVVT</b>	206	1.09	5.2	0.86 - 1.76	1					1.08	-0.23
Siemens LA2 confirmation	108	1.09	4.4	0.88 - 1.56	1					1.08	-0.31
Stago DRVVT Confirm	20	1.10	6.4	1.02 - 1.40							
Werfen Hemosil dRVVT confirm	69	1.09	6.5	0.86 - 1.76							
<b>SCT</b>	50	1.16	9.3	0.96 - 1.94							
Werfen Hemosil SCT confirm	49	1.15	8.8	0.96 - 1.94							

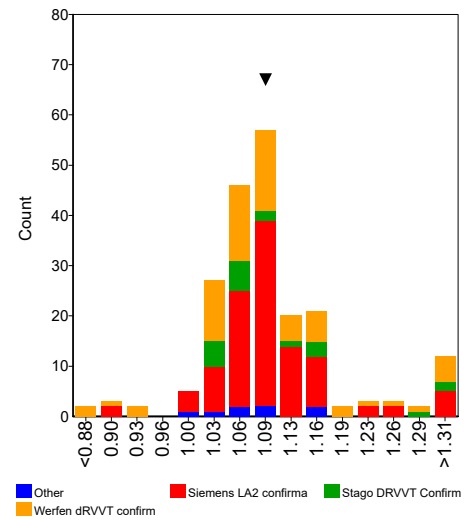
## Assays



## APTT



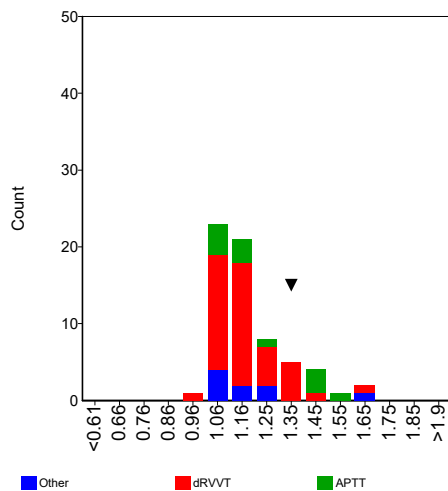
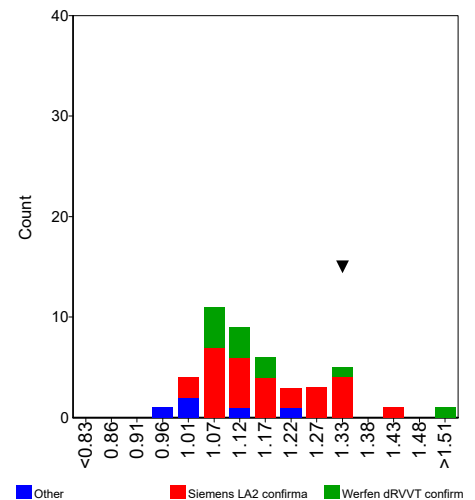
## DRVVT



**Lupus Anticoagulant****Mixing (confirm)****Ratio MRI**

	n	assigned value	CV (%)	Range	Test System	Panel 1	Z-score	Panel 2	Z-score	Panel 3	Z-score
--	---	----------------	--------	-------	-------------	---------	---------	---------	---------	---------	---------

<b>APTT</b>	12	1.26	17.1	1.03 - 1.54							
Siemens Actin FS	7	1.10		1.03 - 1.22							
<b>dRVVT</b>	44	1.15	9.8	0.96 - 1.60	1					1.32	1.52
Siemens LA2 confirmation	28	1.17	9.8	1.03 - 1.43	1					1.32	1.34
Werfen HemosIL dRVVT confirm	11	1.14	8.8	1.04 - 1.60							
<b>SCT</b>	7	1.10		1.01 - 1.29							
Werfen HemosIL SCT confirm	7	1.10		1.01 - 1.29							

**Assays****DRVVT****Comments**

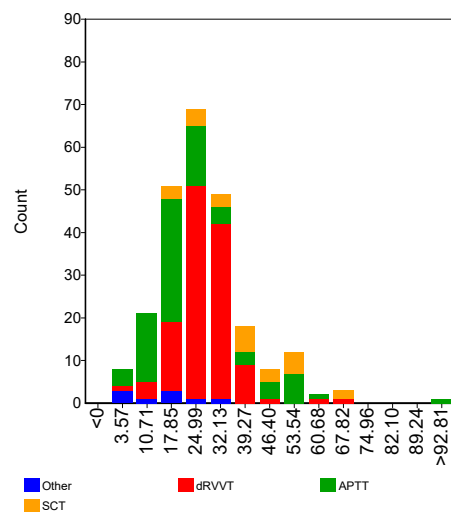
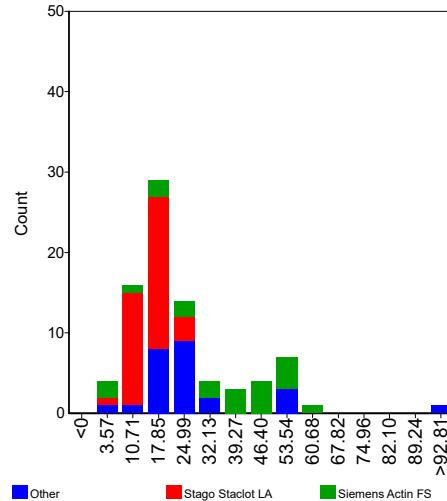
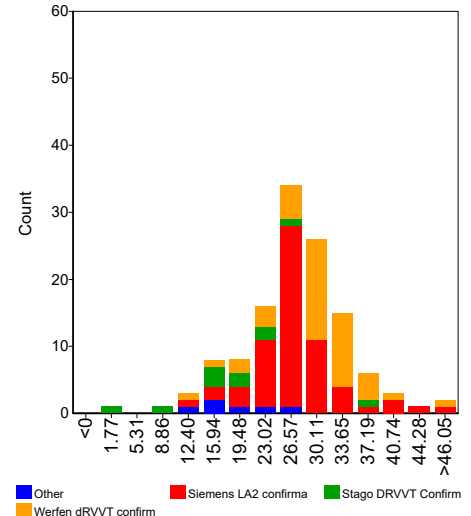
Several participants selected the wrong unit, e.g., ratio while the result was likely to be in seconds, or vice versa. Other participants reported their result for the ECAT plasma in seconds, while the result for their reference plasma or the mean of the reference interval was reported as a ratio or vice versa. In all these cases, the ratio between the ECAT plasma and the laboratorie's own reference plasma and/or the mean of the reference interval could not be correctly calculated. All these results were excluded from the statistical analysis.

The majority of mixing confirmation tests performed (58%), were classified as not elevated.

In general, comparable results were observed for the ratio ECAT plasma over Normal Plasma and ratio ECAT plasma over Mean Reference Interval (MRI).

**Lupus Anticoagulant**
**Interpretation**
**Delta Seconds**

	n	assigned value	CV (%)	Range	Test System	Panel 1	Z-score	Panel 2	Z-score	Panel 3	Z-score
<b>APTT</b>	83	22.36	55.7	4.00 - 93.80							
Precision Biologic CRYOcheck Hex LA Cor	9	25.20		10.90 - 31.00							
Siemens Actin FS	21	36.76	50.8	4.00 - 59.00							
Stago Staclot LA	37	15.32	32.8	6.00 - 24.40							
<b>dRVVT</b>	124	27.40	22.7	1.55 - 67.10							
Siemens LA2 confirmation	63	27.00	15.2	11.60 - 67.10							
Stago DRVVT Confirm	11	18.90	42.7	1.55 - 36.90							
Werfen HemosIL dRVVT confirm	44	30.59	16.8	11.10 - 61.00							
<b>PNP</b>	5	7.10		3.40 - 15.60							
<b>SCT</b>	26	39.56	37.2	17.90 - 67.00							
Werfen HemosIL SCT confirm	26	39.56	37.2	17.90 - 67.00							

**Assays**

**APTT**

**DRVVT**

**Comments**

It is not clear whether all results submitted for Delta Seconds reflect in all cases the difference in clotting time between the screen and confirmation test (or reagent 1 and reagent 2).

Please submit for Delta Seconds only the value which is the difference in clotting time between the screen and confirmation test (or difference between reagent 1 and reagent 2).

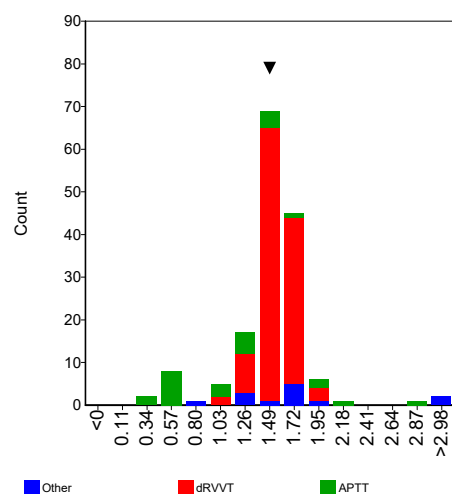
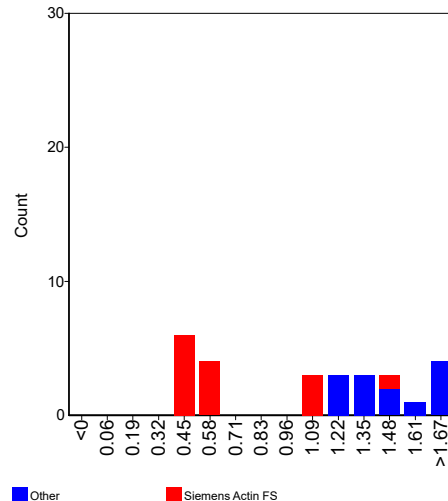
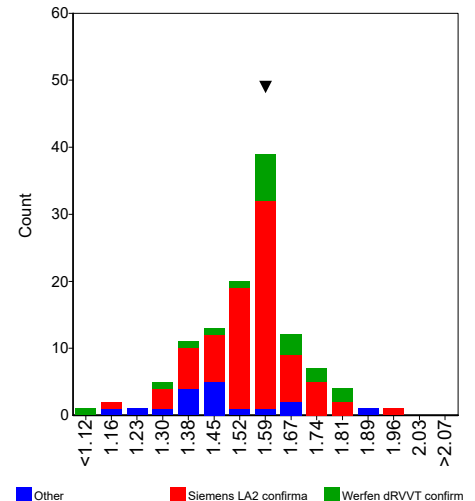
The following participants reported deviating results which were excluded from the statistical analysis:

**803 :** 0  
**1781 :** 125  
**1602 :** 260.7

Some participants reported their result for Delta Seconds as a negative result. Please, report in future surveys the result without the negative prefix.

**Lupus Anticoagulant**
**Interpretation**
**Ratio Screen/Confirmation - Standard**

	n	assigned value	CV (%)	Range	Test System	Panel 1	Z-score	Panel 2	Z-score	Panel 3	Z-score
<b>APTT</b>	27	1.12	55.2	0.43 - 2.79							
Siemens Actin FS	14	0.69	47.5	0.43 - 1.50							
<b>dRVVT</b>	117	1.55	8.3	1.08 - 1.96	1					1.57	0.12
Siemens LA2 confirmation	81	1.56	6.7	1.18 - 1.96	1					1.57	0.05
Stago DRVVT Confirm	7	1.42		1.26 - 1.56							
Werfen HemosIL dRVVT confirm	19	1.60	9.9	1.08 - 1.84							
<b>SCT</b>	8	1.73		1.33 - 3.92							
Werfen HemosIL SCT confirm	7	1.72		1.33 - 1.93							

**Assays**

**APTT**

**DRVVT**

**Comments**

Some participants did not indicate which type of ratio screen/confirmation they reported (standard ratio or normalised ratio). These results have been excluded from the statistical analysis. **Don't forget to select the type of ratio in the next survey.**

The average ratio screen / confirmation is in general in line with the expected LA ratio (approx. 1.6). For the assay type "APTT" in combination with the method Siemens Actin FS the LA ratio is slightly lower compared to the other method types.

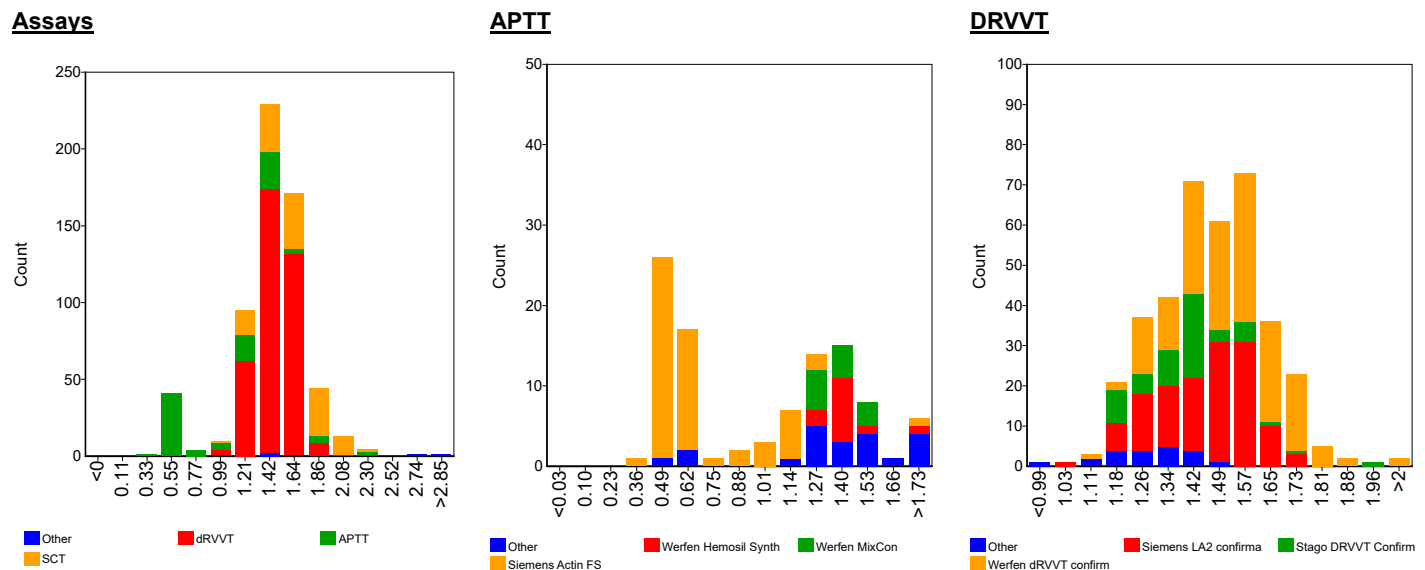
The following participants reported deviating results which were excluded from the statistical analysis:

271 : 12.6  
 296A (instr. 1) : 15  
 296A (instr. 2) : 16.4  
 66603860 : 13



**Lupus Anticoagulant**
**Interpretation**
**Ratio Screen/Confirmation - Normalised**

	n	assigned value	CV (%)	Range	Test System	Panel 1	Z-score	Panel 2	Z-score	Panel 3	Z-score
<b>APTT</b>	101	1.00	48.6	0.41 - 2.40							
Siemens Actin FS	56	0.65	31.8	0.41 - 1.80							
Stago PTT LA	5	1.35		0.60 - 2.40							
Werfen Hemosil SynthAFax	12	1.39	6.6	1.28 - 2.30							
Werfen MixCon	12	1.38	8.4	1.24 - 1.54							
<b>dRVVT</b>	379	1.47	11.1	0.96 - 2.21							
Hyphen Biomed Hemoclot LA-C	7	1.18		1.10 - 1.52							
Roche Lupus C	6	1.33		1.29 - 1.45							
Siemens LA2 confirmation	129	1.46	9.9	1.00 - 1.74							
Stago DRVVT Confirm	54	1.39	9.5	1.17 - 1.95							
Werfen Hemosil dRVVT confirm	175	1.53	10.3	1.13 - 2.21							
<b>SCT</b>	129	1.63	17.7	1.06 - 2.22							
Werfen Hemosil SCT confirm	129	1.63	17.7	1.06 - 2.22							

**Assays**

**Comments**

Some participants did not indicate which type of ratio screen/confirmation they reported (standard ratio or normalised ratio). These results have been excluded from the statistical analysis. **Don't forget to select the type of ratio in the next survey.**

The average ratio screen / confirmation is in general in line with the expected LA ratio (approx. 1.6). For the assay type "APTT" in combination with the method Siemens Actin FS the LA ratio is slightly lower compared to the other method types, as also was observed for the parameter: "Ratio Screen/Confirmation - Standard".

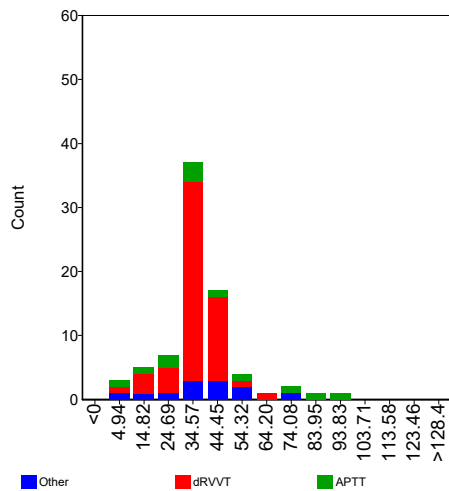
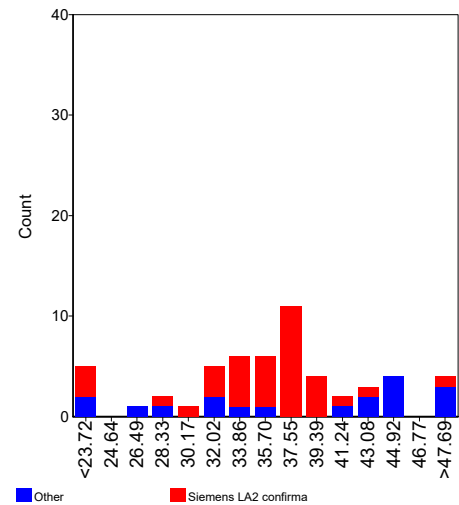
Most participants reported their ratio screen / confirmation as normalised ratio.

The following participant reported a deviating result which was excluded from the statistical analysis:

**9907349 :** 25

**Lupus Anticoagulant**
**Interpretation**
**Percentage Correction - Standard**

	n	assigned value	CV (%)	Range	Test System	Panel 1	Z-score	Panel 2	Z-score	Panel 3	Z-score
<b>APTT</b>	12	43.83	64.3	5.30 - 95.00							
Siemens Actin FS	5	70.72		5.30 - 95.00							
<b>dRVVT</b>	54	36.38	18.6	1.72 - 64.10							
Siemens LA2 confirmation	36	35.71	11.2	14.70 - 64.10							
Stago DRVVT Confirm	5	31.40		20.62 - 36.56							
Werfen HemosIL dRVVT confirm	9	44.70		1.72 - 48.00							
<b>SCT</b>	9	45.20		23.90 - 74.50							
Werfen HemosIL SCT confirm	8	44.10		23.90 - 55.37							

**Assays**

**DRVVT**

**Comments**

Some participants did not indicate which type of correction they have reported (standard correction or normalised correction). These results have been excluded from the statistical analysis. Don't forget to select the type of correction in the next survey.

The following participant reported a deviating result which was excluded from the statistical analysis:

**9907615 :** 0%

Some participants reported their result for percentage correction as a negative result. Please, report in future surveys the result without the negative prefix.

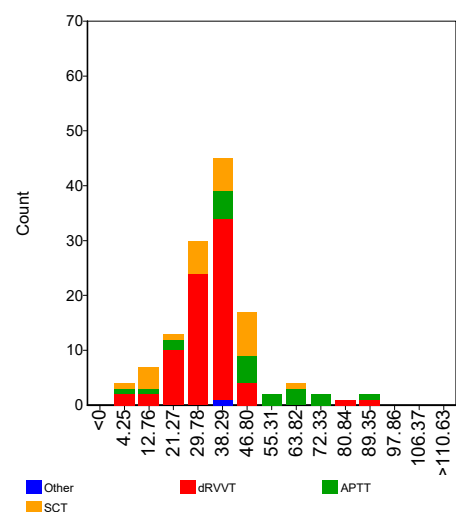
## Lupus Anticoagulant

## Interpretation

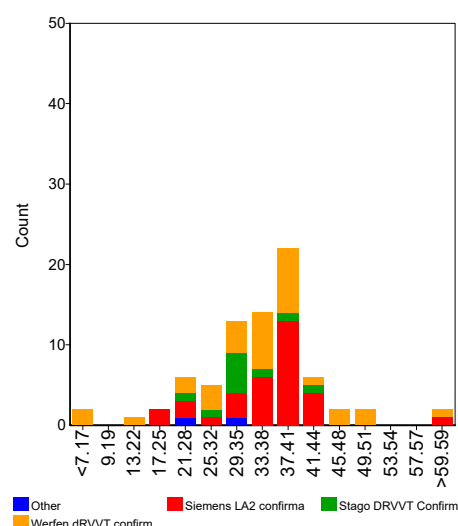
### Percentage Correction - Normalised

	n	assigned value	CV (%)	Range	Test System	Panel 1	Z-score	Panel 2	Z-score	Panel 3	Z-score
<b>APTT</b>	22	46.50	46.0	1.00 - 91.24							
Siemens Actin FS	7	65.00		40.00 - 91.24							
<b>dRVVT</b>	77	33.15	22.4	1.00 - 92.00							
Siemens LA2 confirmation	32	34.74	16.9	16.00 - 78.20							
Stago DRVVT Confirm	10	29.97	18.7	20.60 - 40.56							
Werfen HemosIL dRVVT confirm	33	33.38	26.2	1.00 - 92.00							
<b>SCT</b>	27	34.17	40.6	1.00 - 65.90							
Werfen HemosIL SCT confirm	27	34.17	40.6	1.00 - 65.90							

### Assays



### DRVVT



### Comments

Some participants did not indicate which type of correction they have reported (standard correction or normalised correction). These results have been excluded from the statistical analysis. Don't forget to select the type of correction in the next survey.

Some participants reported their result for percentage correction as a negative result. Please, report in future surveys the result without the negative prefix.

## Lupus Anticoagulant

## Final Conclusion

Testing Strategies	Classification				Your Classification			
	Equivocal	LA detected	LA not detected	No conclusion	Test System	Panel 1	Panel 2	Panel 3
Screen test only	2	15	1	11	1			
					2			
					3			
Screen and mixing test	4	60	9	9	1			
					2			
					3			
Screen and confirm test	15	423	31	15	1			
					2			
					3			
Screen, mixing and confirm test		240	35	9	1			LA detected
					2			
					3			
Screen, confirm, mixing test	3	144	20	5	1			
					2			
					3			
Mixing - confirmation	1	32	1	3	1			
					2			
					3			

Final Conclusion				Your Results		
Counts				Test System 1	Test System 2	Test System 3
LA detected	LA not detected	Equivocal	No Conclusion			
446	27	23	17	LA detected		

### Comments

The sample used in this survey was plasma from a patient diagnosed with Lupus Anticoagulant (LA Ratio = approx. 1.6). No other types of inhibitors were present.

In total 496 participants gave a final conclusion. Of the participants who gave a final conclusion, approximately 90% classified the sample as positive. Less than five percent classified the sample as equivocal. Thus, the vast majority of the participants correctly classified this sample as positive. A minority (3.4%) of the participants classified this sample as negative, this does not seem to be affected by the test strategy but is probably caused by the sensitivity of the reagent and the local interpretation of the result (e.g., local cut-off value used).

Participants stated that there is an indication that this sample is weakly positive for lupus anticoagulant but in real clinical practice this should be confirmed in a new sample after 12 weeks.

Some participants indicated that the presence of heparin and/or factor deficiency should be excluded. Another participant indicated that pretreatment with DOAC STOP left the parameters unchanged and concluded that there was no indication for the presence of DOAC in the sample.

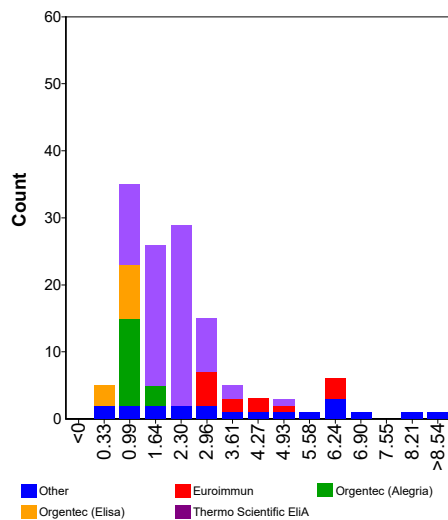
**Lupus Anticoagulant**
**AntiCardiolipin Antibodies IgG**

Sample No	25.186		
Sample Details	Plasma positive for Lupus Anticoagulant (LA Ratio approx. 1.6)		
Prior Use	Prior Use: None		
Unit	GPL, U/mL, µg/mL, CU/mL		
Expiry Date	31-May-2027		
Homogeneity	0.5 %	Homogeneity Parameter	LA ratio
	For any method used for the measurement of this parameter with a <b>CV ≤ 1.7%</b> 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	639		
Number of Responders	238	Response Rate	37 %

Classification	Negative	Borderline	Low Positive	Medium Positive	High Positive	No Conclusion
Total	237	1	1	0	0	1

**IgG**

	n	assigned value	CV (%)	range	Test System 1 Result	z-score	Test System 2 Result	z-score	Test System 3 Result	z-score
U/mL, µg/mL, GPL/MPL	131	2.0	54.8	0.0 - 12.0						
Aeskulisa Diagnostic GmbH	6	3.7		2.0 - 6.0						
Euroimmun	13	4.1	36.7	2.6 - 6.2						
Orgentec (Alegria)	16	1.0	24.2	0.7 - 1.8						
Orgentec (Elisa)	11	0.9	36.5	0.5 - 1.3						
Thermo Scientific EliA	71	2.0	34.5	0.9 - 5.2						
CU/mL	63	3.2	16.2	0.8 - 16.2						
Werfen Acustar / INOVA Quanta Flash	63	3.2	16.2	0.8 - 16.2						

**GPL, U/mL, µg/mL**

**Comments**

Most of the participants reported a negative classification.

The following participants reported deviating results which were excluded from the statistical analysis:

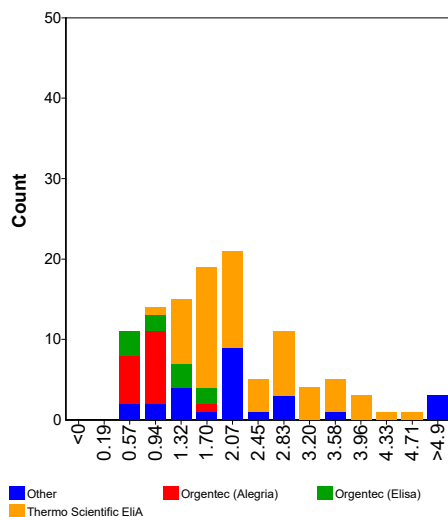
737 : 0 CU/mL  
 1353 : 0.19 U/mL  
 9907155: 0 U/mL

**Lupus Anticoagulant**
**AntiCardiolipin Antibodies IgM**

<b>Sample No</b>	25.186		
<b>Sample Details</b>	Plasma positive for Lupus Anticoagulant (LA Ratio approx. 1.6)		
<b>Prior Use</b>	Prior Use: None		
<b>Unit</b>	MPL, U/mL, µg/mL, CU/mL		
<b>Expiry Date</b>	31-May-2027		
<b>Homogeneity</b>	0.5 %	<b>Homogeneity Parameter</b>	LA ratio
	For any method used for the measurement of this parameter with a <b>CV ≤ 1.7%</b> 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.		
<b>Number of Participants</b>	639		
<b>Number of Responders</b>	230	<b>Response Rate</b>	36 %

Classification	Negative	Borderline	Low Positive	Medium Positive	High Positive	No Conclusion
<b>Total</b>	230	1	0	0	0	1

IgG	n	assigned value	CV (%)	range	Test System 1 Result	z-score	Test System 2 Result	z-score	Test System 3 Result	z-score
<b>U/mL, µg/mL, GPL/MPL</b>	113	1.9	51.4	0.5 - 8.0						
Aeskulisa Diagnostic GmbH	5	1.0		0.6 - 5.1						
Euroimmun	7	2.0		2.0 - 2.3						
Orgentec (Alegria)	16	0.8	23.8	0.6 - 1.8						
Orgentec (Elisa)	10	1.1	46.6	0.5 - 1.8						
Thermo Scientific EliA	61	2.3	37.1	1.0 - 4.6						
<b>CU/mL</b>	83	2.7	13.0	1.7 - 3.4						
Werfen Acustar / INOVA Quanta Flash	83	2.7	13.0	1.7 - 3.4						

**MPL, U/mL, µg/mL**

**Comments**

Most of the participants reported a negative classification.

The following participants reported deviating results which were excluded from the statistical analysis:

**1353 :** 0.16 U/mL  
**9065 :** 0 U/mL  
**9907155:** 0 U/mL

## Lupus Anticoagulant

**Sample No** 25.186  
**Sample Details** Plasma positive for Lupus Anticoagulant (LA Ratio approx. 1.6)  
**Prior Use** Prior Use: None  
**Unit** U, U/mL, µg/mL, CU/mL  
**Expiry Date** 31-May-2027  
**Homogeneity** 0.5 %

**Homogeneity Parameter** LA ratio

For any method used for the measurement of this parameter with a **CV ≤ 1.7%** 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** 639

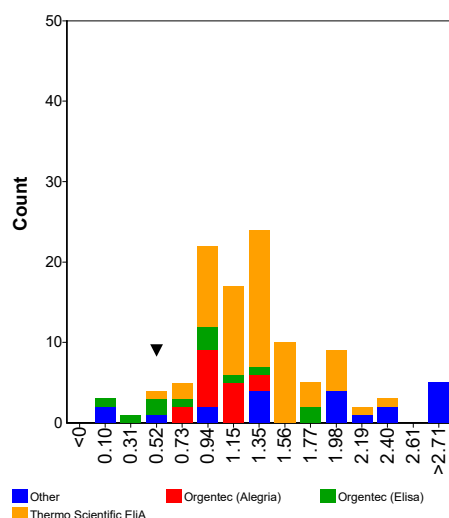
**Number of Responders** 231 **Response Rate** 36 %

Classification	Negative	Borderline	Low Positive	Medium Positive	High Positive	No Conclusion
<b>Total</b>	233	0	0	0	0	1

## IgG

	n	assigned value	CV (%)	range	Test System 1 Result	z-score	Test System 2 Result	z-score	Test System 3 Result	z-score
<b>U, U/mL, µg/mL</b>	110	1.3	37.0	0.0 - 7.8	0.6	-1.47				
Aeskulisa Diagnostic GmbH	6	2.3		1.0 - 3.0						
Euroimmun	5	2.0		2.0 - 7.8						
Orgentec (Alegria)	16	1.0	21.0	0.7 - 1.4						
Orgentec (Elisa)	12	0.9	63.0	0.2 - 1.8	0.6	-0.57				
Thermo Scientific EliA	61	1.3	25.6	0.5 - 2.3						
<b>CU/mL</b>	30	5.3	36.9	0.9 - 10.0						
Werfen Acustar / INOVA Quanta Flash	30	5.3	36.9	0.9 - 10.0						

## U, U/mL, µg/mL



## Comments

Most of the participants reported a negative classification.

The following participants reported deviating results which were excluded from the statistical analysis:

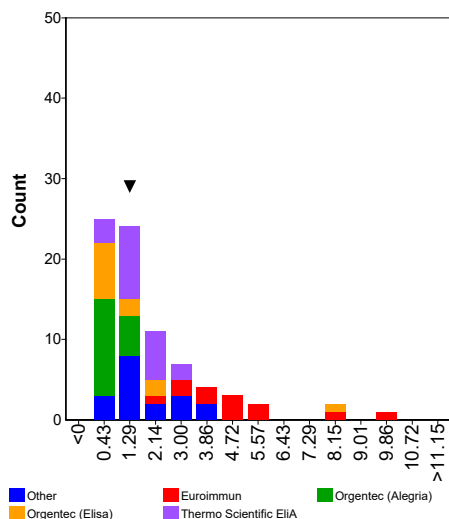
**737 :** 0 CU/mL  
**9065 :** 0 U/mL  
**9907155:** 0 U/mL

**Lupus Anticoagulant**
**β2-Glycoprotein I Antibodies IgM**

Sample No	25.186		
Sample Details	Plasma positive for Lupus Anticoagulant (LA Ratio approx. 1.6)		
Prior Use	Prior Use: None		
Unit	U, U/mL, µg/mL, CU/mL		
Expiry Date	31-May-2027		
Homogeneity	0.5 %	Homogeneity Parameter	LA ratio
	For any method used for the measurement of this parameter with a <b>CV ≤ 1.7%</b> 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	639		
Number of Responders	218	Response Rate	34 %

Classification	Negative	Borderline	Low Positive	Medium Positive	High Positive	No Conclusion
Total	219	0	1	0	0	1

IgG	n	assigned value	CV (%)	range	Test System 1 Result	z-score	Test System 2 Result	z-score	Test System 3 Result	z-score
U, U/mL, µg/mL	79	1.6	73.6	0.1 - 10.1	0.9	-0.61				
Aeskulisa Diagnostic GmbH	6	2.2		1.0 - 4.0						
Euroimmun	12	4.8	43.9	2.4 - 10.1						
Orgentec (Alegria)	17	0.7	24.4	0.6 - 1.2						
Orgentec (Elisa)	12	1.0	61.6	0.5 - 8.1	0.9	-0.15				
Thermo Scientific EliA	20	1.6	54.9	0.3 - 2.9						
CU/mL	61	1.3	15.3	0.7 - 2.4						
Werfen Acustar / INOVA Quanta Flash	61	1.3	15.3	0.7 - 2.4						

**U, U/mL, µg/mL**

**Comments**

Most of the participants reported a negative classification.

The following participants reported deviating results which were excluded from the statistical analysis:

737 : 0 CU/mL  
 9907155 : 0 U/mL