

UK NEQAS BC Point of Care programmes Annual Summary

UK NEQAS BC provides EQA for the following POC tests.

Table 1 below shows test provided and numbers enrolled for each programme for 2022 calendar year.

	Number enrolled	Number of surveys	Surveys covered
INR CoaguChek XS series	2107	4	XS60-63
INR CoaguChek Pro II	1628	4	Pro II 60-63
INR i-STAT	19	4	I-Stat 38-41
INR Xprecia Stride	154	4	Xprecia stride 25-28
INR LumiraDx	52	4	LumiraDx 2-5
ACT+ Hemochrom	248	3	ACT+ 37-39
ACT-LR Hemochrom	141	3	ACT LR 19-21
D-dimer Cobas h232	63	4	DD cobas h232 32-35
D-dimer Triage	33	4	DD Triage 32-35
TEG5000	28	3	TEG5000 23-25
TEG6	64	3	TEG6 9-11
Rotem Delta	16	3	Rotem 23-25
Rotem Sigma	57	3	Rotem Sigma 9-11
Total	4610		

Table 2 shows a review of the years samples showing range of medians, CV% and outwith consensus percentage range

INR	Medians ranged between	CV% ranged between	% Outwith consensus ranged between
CoaguChek XS series	1.6-3.6	3.1-6.8	1.4-2.4
CoaguChek Pro II	1.6-3.8	3.1-11.7	1.0-3.4
i-STAT	2.4-2.7	9.4-14.7	5.6-12.5
Xprecia Stride	1.8-3.3	3.9-15.3	0-10.0
LumiraDx			
ACT+ Hemochrom seconds	162-424	5.9-16.8	1.7-17.5
ACT-LR Hemochrom seconds	135-256	12.3-15.4	7.9-19.4
D-dimer Cobas h232 µg/ml FEU	0.29-1.62	10.9-24.7	14.9-20.4
D-dimer Triage ng/ml FEU	271-2950	10-36.6	12.1-20
TEG5000 Plain R time minutes	11.2-29.5	10.5-37.7	0-12.5
TEG5000 Hep cup R time minutes	12.6-30	3-41.4	0-11.8
TEG6 CK time minutes	15.6-30	1.8-26.0	0-10.2
TEG6 CKH time minutes	15.6-30	1.9-22.2	0-8.2
Rotem Delta ExTEM seconds	50-224	8.3-10.9	0
Rotem Delta InTEM seconds	154-224	6.3-25.9	0-14.3
Rotem Delta HepTEM seconds	166-293	Not scored, <10 users	Not scored, <10 users

Rotem Sigma FibTEM seconds	100-562	21.3-29.9	4-7.9
Rotem Sigma Extem seconds	110.5-602	20.1-33.1	4.0-13.2
Rotem Sigma InTEM seconds	294-413	6.8-12.4	0-2
Rotem Sigma HepTEM seconds	279-377.5	7.9-10.6	0
Rotem Sigma ApTEM seconds	99-516	19.9-31.5	5.6-20.7

Directors Commentary:

During this year's surveys we have transitioned all the POC INR programmes onto our new Database management system. We appreciate that this has been challenging for some users, but we feel that the benefits of the new system will be apparent in a short time and ultimately users will prefer the new system once users become familiar with it.

We plan to transition all other POC programmes (online entry and paper based) to this new system over the coming year.

We note that for POC INR there has been a drop in return rates and we strongly encourage all users to make time to complete the survey and be involved. Even missing one survey means that for nearly a 6 month period your tests system has not had any EQA. We would strongly recommend that more than one member of staff is trained to perform this task.

Information contained in this report meets standards BS EN ISO/IEC 17043:2010 as detailed below

4.8.2 a) The proficiency provider is

UK NEQAS for Blood Coagulation (BC)

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4.8.2 b) UK NEQAS BC is directed by Professor Isobel Walker and Programme Manager Dr Ian Jennings

4.8.2 c), e) f) and h) the authoriser, date, status and page numbers of this report is shown in the footer and the report number is shown in the title.

4.8.2 d) i) Samples provided are lyophilised and for Point of care (POC) programmes supplied with a pre measured diluent and disposable pipette.

Lyophilisation of plasma is subcontracted to Diagnostic Reagents Ltd.

All samples passed homogeneity, virology testing and calcium verification provide by Coagulation, Microbiology (Virology) and Clinical Chemistry Departments respectively. All samples also undergo stability testing for the duration of each survey. Homogeneity and stability tests are subcontracted to the STH NHS Trust coagulation department

The subcontractors are regularly audited (including accreditation status) to confirm competence to provide their services to UK NEQAS BC.

4.8.2 g) UK NEQAS BC survey reports are posted to the secure online data entry system, accessible only by participant number and unique password. UK NEQAS BC does not share participant information with any 3rd party, except with respect to unresolved performance issues which can be reported to our steering committee and if required to NQAAP, Please see our privacy policy, available online at www.neqascoag.org. However, as articulated in the Pathology Quality Assurance Review, participants are encouraged to share their EQA performance data both within and outside of their department.

4.8.2 k) l), m) n) o) and r) Results from all participants are analysed to calculate the target range, based on the median INR +/-15%, rounded to the nearest 1 decimal place. Results within this target range are considered "within consensus", that is, in reasonable agreement

with other participants. Results "outwith consensus" may indicate an instrument bias, and may require further investigation, particularly if present for both samples within a survey, or in consecutive surveys.

The standard uncertainty of the median value U_x ($1.25 \times SD/n^{0.5}$) is shown in the tables in this report. This is based on the consensus value from participants, and is shown to give an indication of the statistical variation around the median values.

4.8.2 q) UK NEQAS BC schemes are designed with support from our steering committee which meet twice per year.

4.8.2 j), p) s), and t) Individual participant's results, comments on performance, advice on the interpretation of the statistical analysis and recommendations are not included in this summary report; these are covered in participant's individual reports.