HAEMATOLOGY PERFORMANCE DASHBOARD

Enhancing Your Performance Reviews with the UK NEQAS All-in-One Dashboard

Yvonne Hector

Haematology Service Manager

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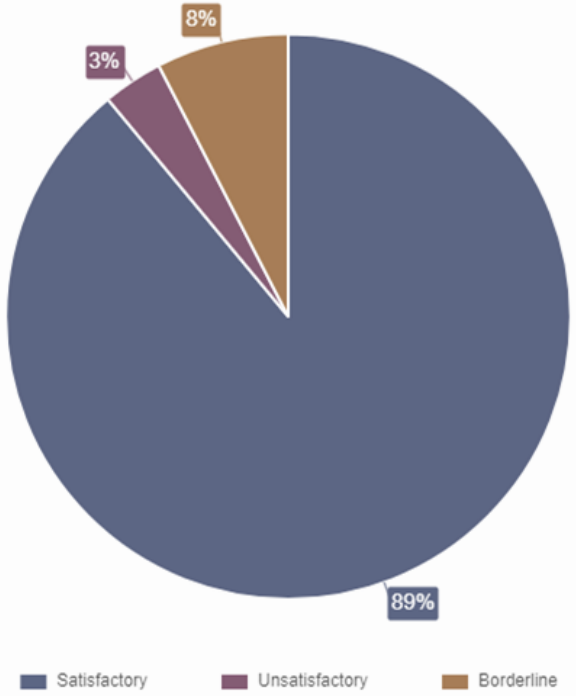

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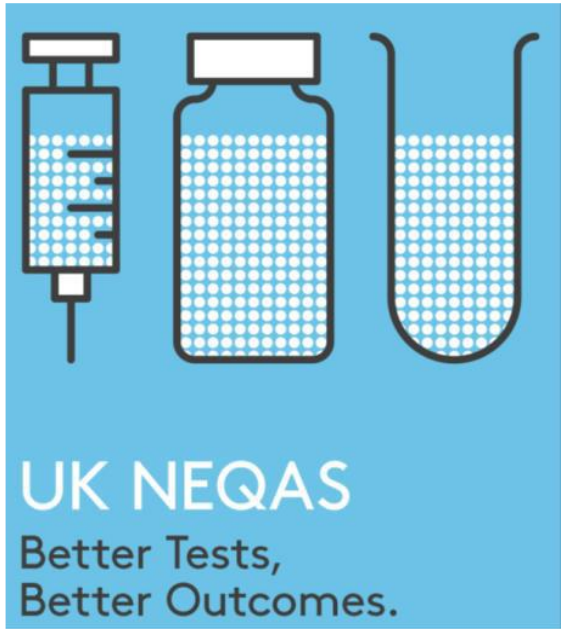
OVERVIEW

- ❑ EQA performance dashboard - what do we mean?
- ❑ Why is this important?
- ❑ How can a dashboard assist UK NEQAS participants?
- ❑ Next steps



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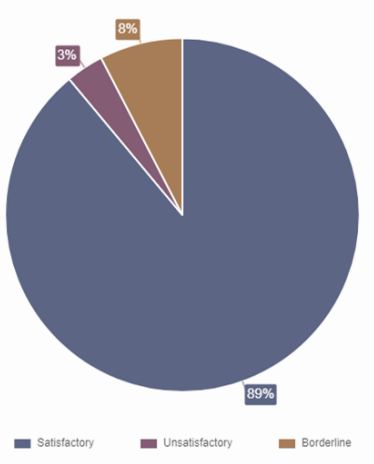
PERFORMANCE DASHBOARD



- The EQA performance dashboard will provide laboratories with a visual representation of their performance for each instrument, and analytes you are registered for

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HOW CAN A DASHBOARD HELP PARTICIPANTS?

- Can utilise dashboards to provide participants with a summary of their EQA status
- Helps participants to easily track your results, identify trends, and benchmark against peers

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HOW CAN A DASHBOARD HELP PARTICIPANTS?

- ❑ Ability to drill down into the information to identify and troubleshoot any issues promptly e.g method related issues, process issues
- ❑ Used for Quality review
- ❑ Report back findings through RAC forms
- ❑ SAVES TIME for both our participants and UK NEQAS

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FEEDBACK FROM UK NEQAS IMMUNOLOGY

"…convenience of accessing our lab's EQA status in a single location, with all the data analysis already completed, saving time for our Quality Managers…"

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MAIN NETWORK DASHBOARD SCREEN

https://www.ukneqash.org

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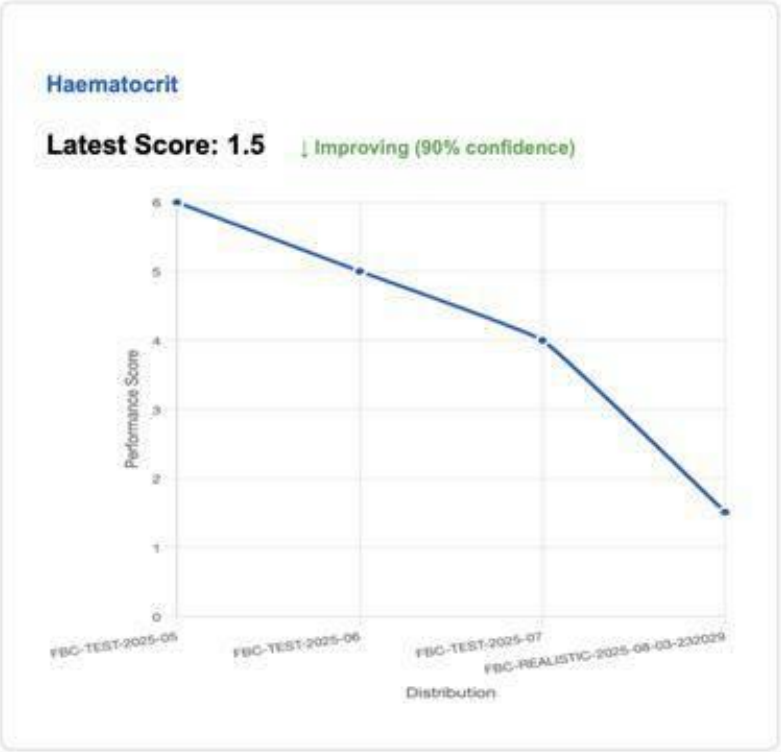
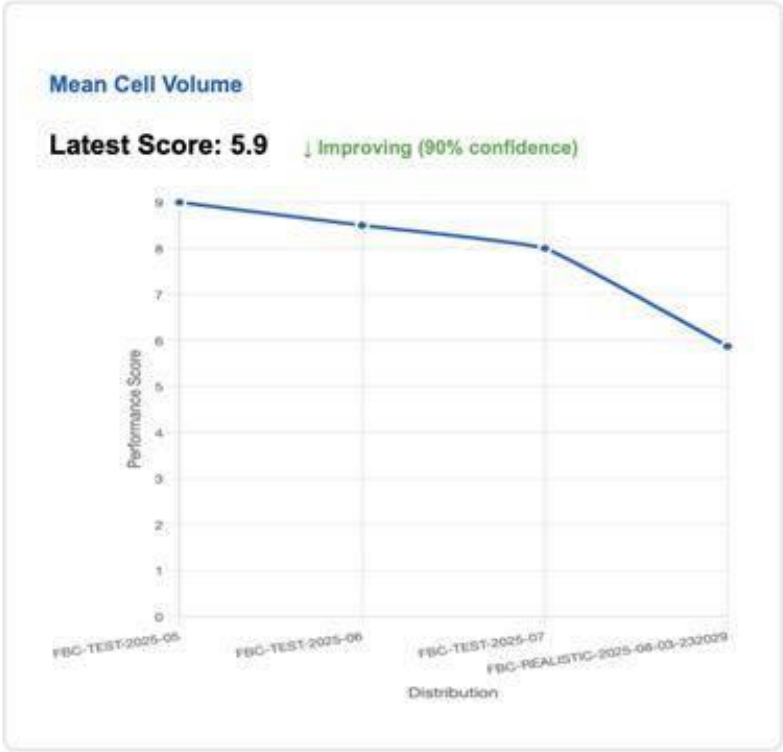
MANN-KENDAL TREND TEST





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NEXT STEPS

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UPCOMING FEATURES

- ❑ Bookmarks/save filters – will allow reapply the filter without reselecting them on every page
- ❑ Export charts/graphs to pdf

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Contact UK NEQAS @ haem@ukneqas.org.uk

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Automating EQA data return
LabgnosticEQA

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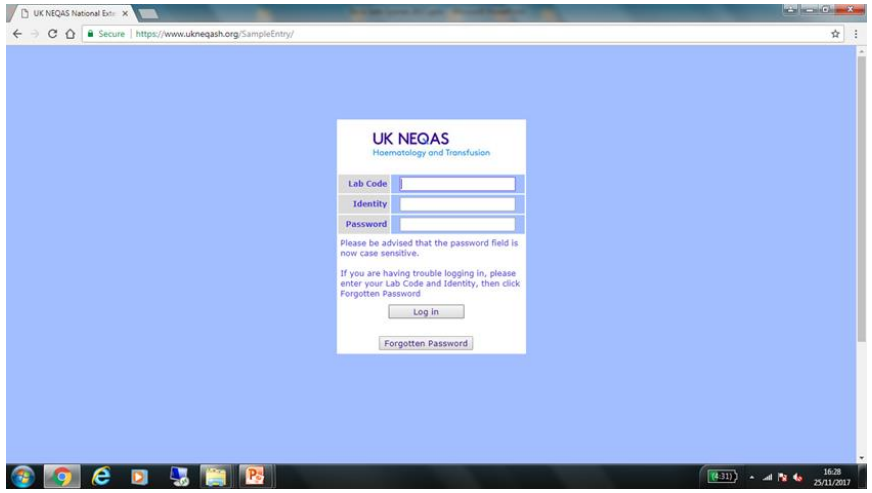
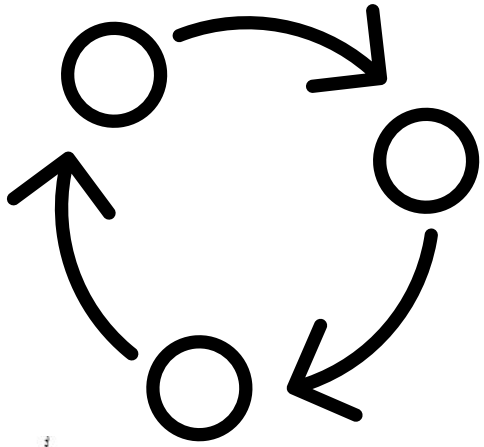
50 Years as World Leaders in EQA 1969–2019

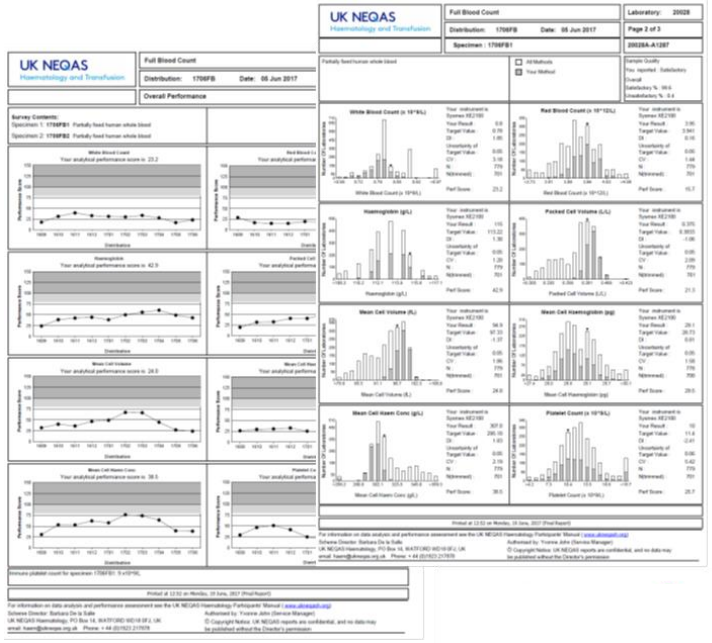
UK NEQAS

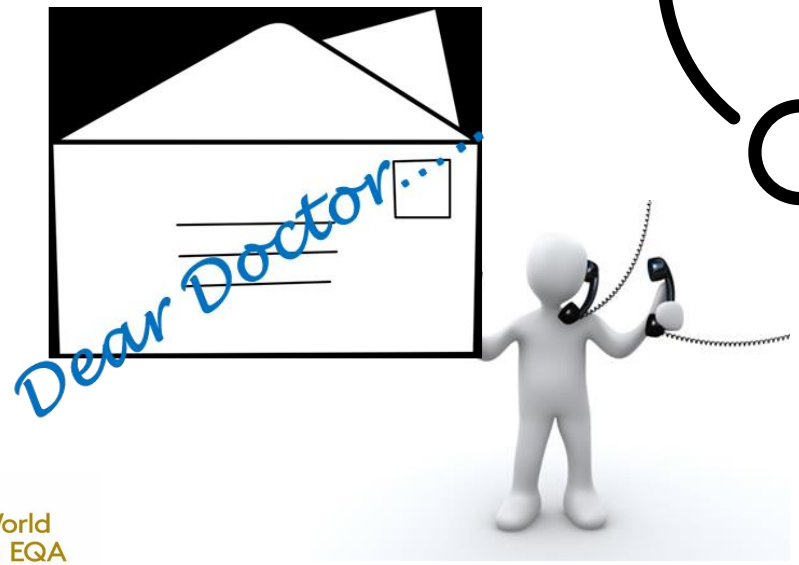
Education | Quality | Global

The UK NEQAS cycle









50 Years as World Leaders in EQA 1969–2019

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Principles of EQA

EQA samples are to be treated in the same way as a patient's sample…as far as is practically possible

Why this doesn't always work for EQA

- Many labs now using 'order comms' systems for clinical requests
- Some EQA specimens must be run in "QC mode" not "patient mode" on automated analysers
- Labs must manually transfer results from either their automated analyser or LIMS to the UK NEQAS data entry website
  - Time-consuming for participants
  - Risk of making data entry errors

What is LabgnosticEQA?

- Formerly known as ‘NPEx’, LabgnosticEQA is a product developed by X-Lab Ltd.
- Enables laboratories to digitally connect directly to their EQA/PT providers, eliminating manual processing and creating a more efficient and accurate EQA/PT workflow.
- They offer seamless integration of a laboratory’s LIMS with UK NEQAS which will enable scientific staff to handle EQA specimens in the same way as normal patient specimens.


UK NEQAS
Haematology and Transfusion
EQA/PT
Provider System
Request message
Results message
Labgnostic
EQA
Request message
Results message
Performer
Scheme Participant
Laboratory System

Quick Poll

Which EQA programmes?

The following programmes are currently set up to return results using this platform:

- Full Blood Count (FB)
- Automated Differential Leucocyte Count (DL)
- Reticulocyte Count (RE)

Went live in January 2025

There is a plan to roll out more programmes in the future

Limitations (1)

- Patient Mode vs QC Mode

The LabgnosticEQA platform only works with specimens that are run in patient mode (i.e. processed in the same way as patient specimens) on automated cell counting analysers.

Any specimens that have specific instructions to run the specimen in QC mode (or as a quality control specimen) are not compatible with the LabgnosticEQA system.

Limitations (2)

- Reporting MCHC

  Not all laboratories report MCHC results clinically, so while the FBC instrument returns a value for MCHC it is not always sent across to LIMS.

  LabgnosticEQA does not automatically upload the MCHC result with FBC.

Current Participant Subscriptions

- FB Programme:

  7 participants, 28 instruments

- DL Programme:

  2 participants, 4 instruments

- RE Programme:

  5 participants, 12 instruments

Why subscribe to LabgnosticEQA?

- One step closer to treating EQA specimens as patient specimens
- Reduce the risk of transcription errors
- Improved efficiency in processing EQA specimens
- X-Lab will support with the setup – they will provide access to a knowledge and service desk for queries
- Onboarding is quick and configuration straightforward

How to subscribe to LabgnosticEQA

- Register with LabgnosticEQA first
- Email UK NEQAS team to inform us of your interest in using this platform to automate your results return
- UK NEQAS team will review your current registration and advise further

Speak to the LabgnosticEQA Team in the exhibition hall today for further info

Contact Us

To learn more and book some time with a dedicated team member, please see below.

www.x-labsystems.com

hello@x-labsystems.co.uk

@labgnostic

linkedin.com/products/x-lab-global-labgnostic

10C Joseph's Well, Hanover Walk
Leeds LS3 1AB

X-Lab

Thank you for listening!

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SIGNED, SEALED... MISDELIVERED!

A comedic tour of customs calamities, courier misfires, and the joys of international logistics

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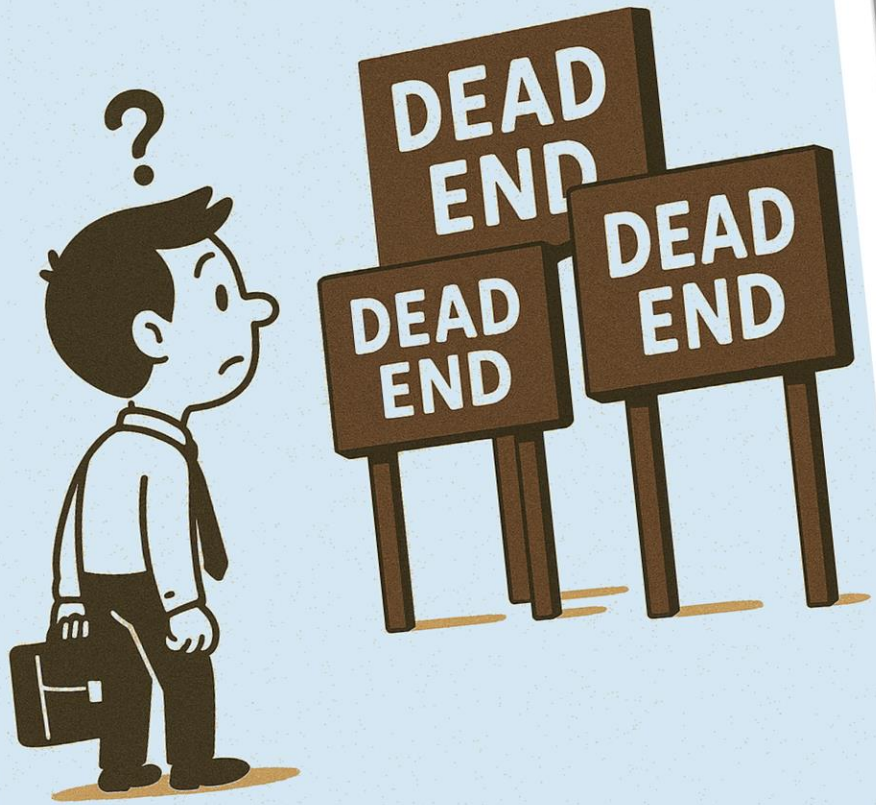
International Quality Expertise

CHALLENGES ENCOUNTERED



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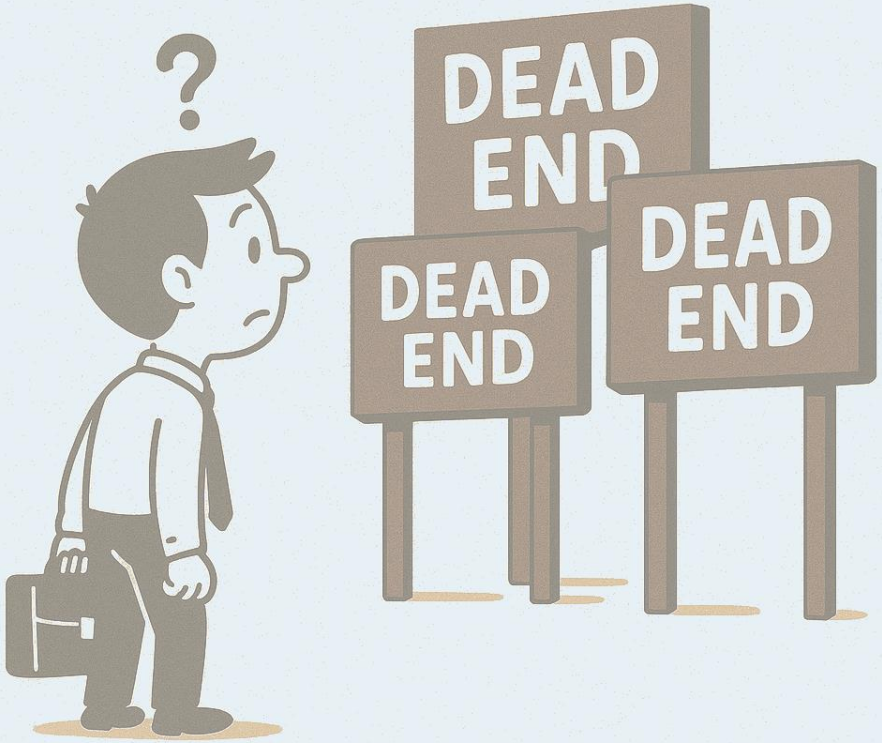
CHALLENGES ENCOUNTERED



- ❑ Brexit – the gift that keeps on giving!
- ❑ Ever changing customs requirements
- ❑ Different customs requirements for different countries

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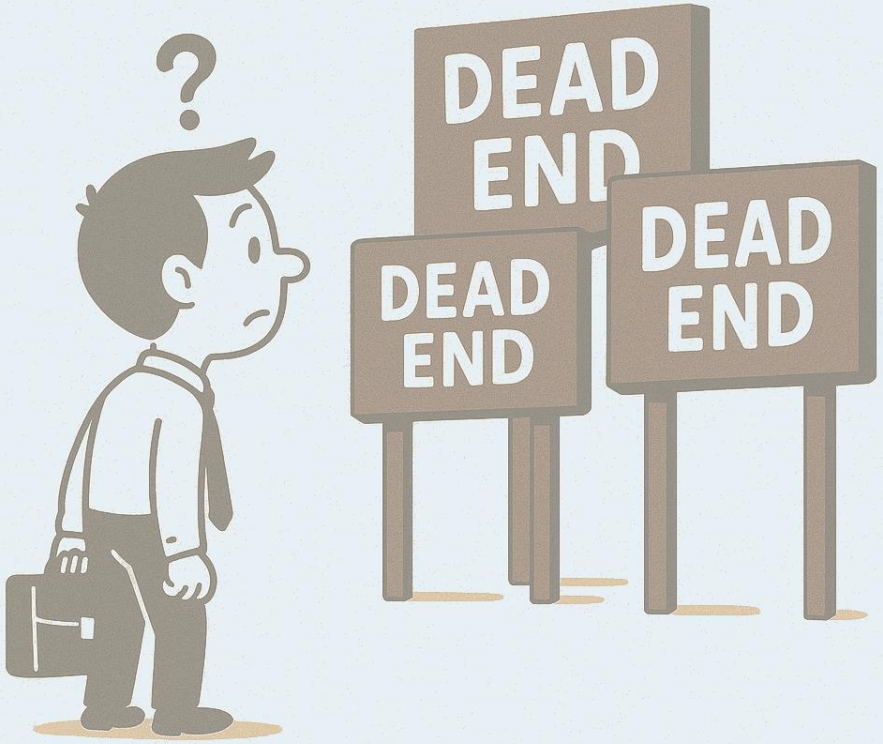
CHALLENGES ENCOUNTERED



- Windsor agreement – Creating issues shipping to Northen Ireland
- Each laboratory has its own specific requirements - exceptions and anomalies are the norm
- Increasing requirements to prepare and provide Labs with documentation well in advance of sending samples

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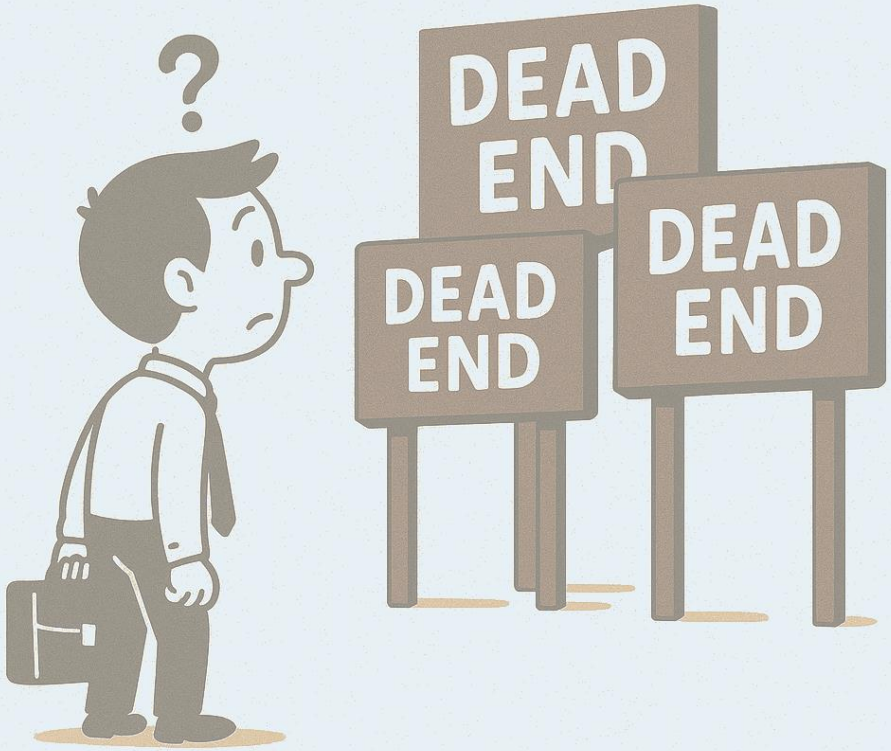
CHALLENGES ENCOUNTERED



- ❑ Participants expectations - apparently, we're psychic!!!
- ❑ Investigating issues with custom clearance - we channel our inner detectives
- ❑ Participants not reading T&Cs relating to Duty & Customs - who needs the fine print when winging it is way more fun!!!

Logistics often demands significant time and effort – it can be like playing whack-a-mole with paperwork from tracking shipments to preparing and constantly revising documentation. Just when it seems like processes are finally in place…

…the goalposts shift
yet again!!!

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THE CURIOUS CASE OF THE WANDERING PACKAGES

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The Curious Case of the Wandering Packages

- A shipment bound for Colombia was mistakenly rerouted to Bangladesh
- Strike action in Canada - DHL was unable to support shipments
- Uploaded paperwork – too much colour was too much to handle!
- Two packages. Two destinations. One very confused lab

The Curious Case of the Wandering Packages

- DHL: redefining express as ‘tomorrow, somewhere nearby
- Incoming shipments that look like they have been dropped from an airplane!

  - The Barcelona-to-Bahrain detour
  - The UK-to-ROI shipment that fancied a German holiday first

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Shipping Stories: When Labs and Logistics Don't Align

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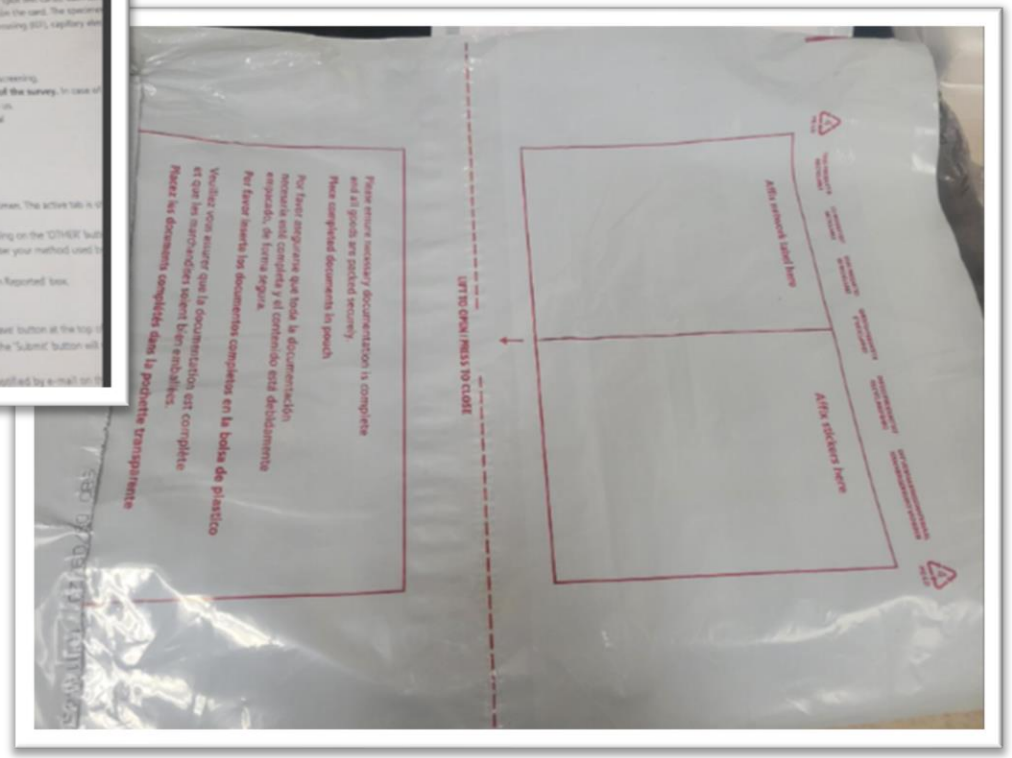
Shipping Stories: When Labs and Logistics Don’t Align

- Double enrolment, double the shipping instructions… double the confusion

- Commercial invoices vs annual fees: a costly mix-up

Our Samples are Hot, HOt, HOT!!!

Our Samples are Hot, HOt, HOT!!!



Proof that DHL envelopes are apparently fireproof… pity about the contents

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Our Samples are Hot, HOt, HOT!!!

The originally sent package

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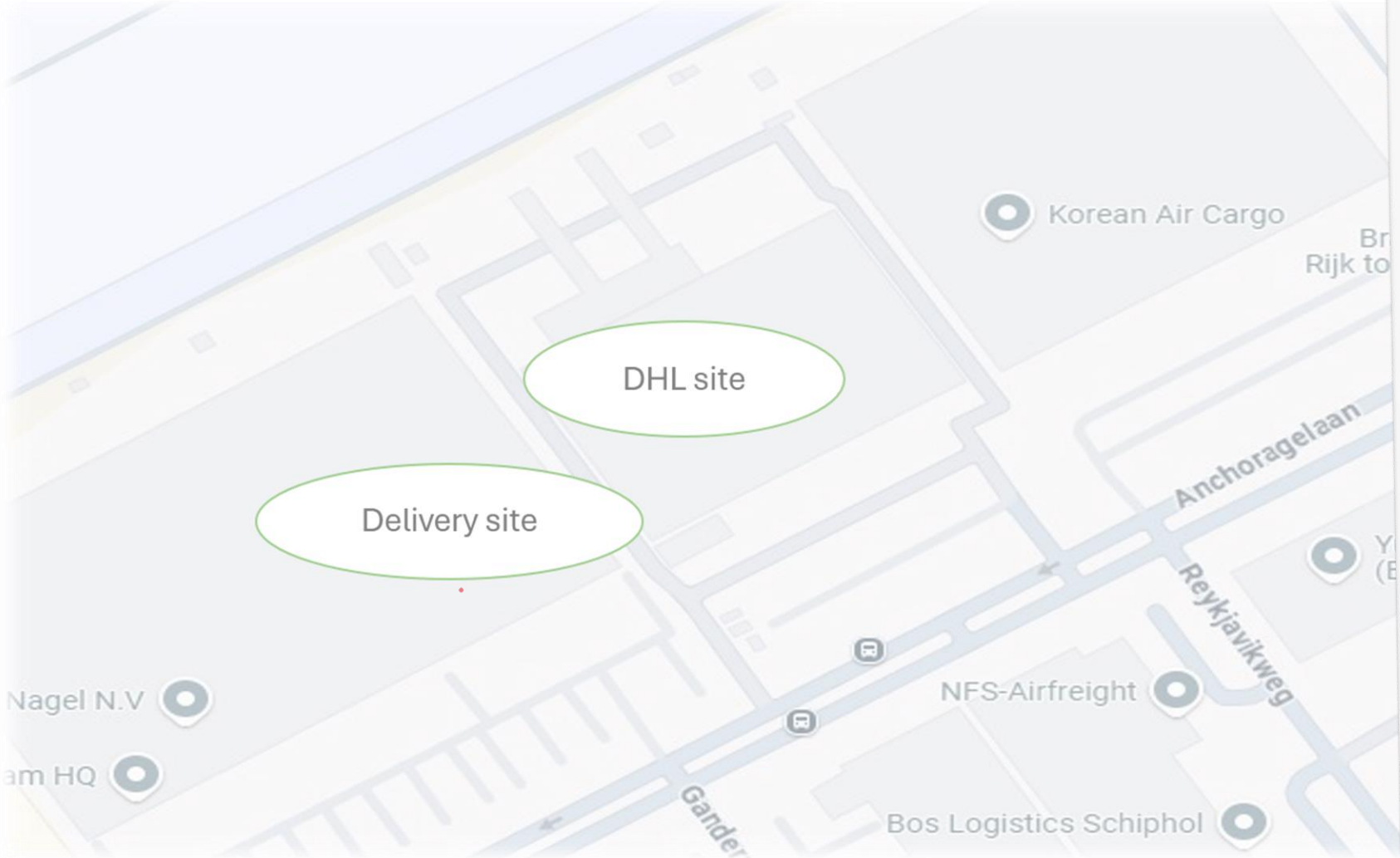

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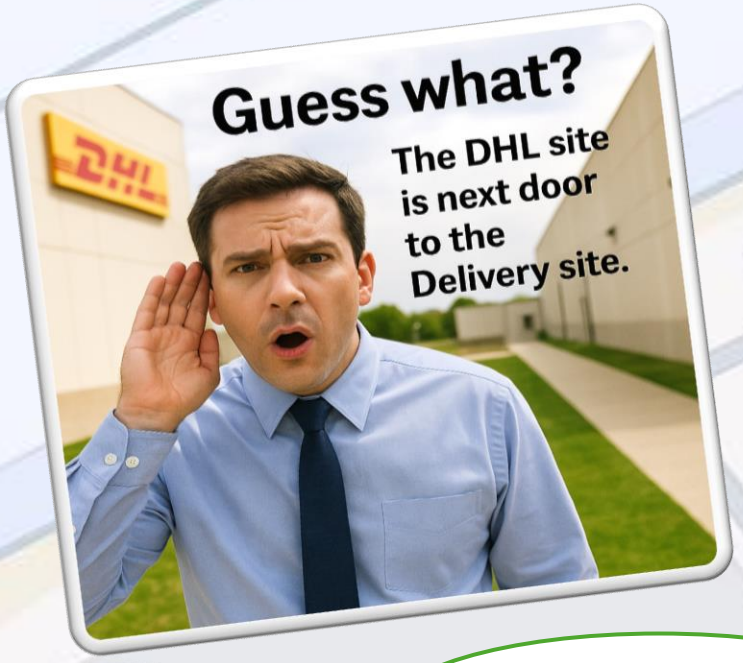

DHL site

Delivery site

Korean Air Cargo

Brandweerpost Rijk toegangspoort

Anchoragelaan

Yusen Logistics (Benelux) BV

Reykjavikweg

NFS-Airfreight

Kuehne + Nagel N.V

ghter-Tecteam HQ

Ganderweg

Bos Logistics Schiphol

World Cargo dam) BV

agelaan

Schiphol Zuid-Oost

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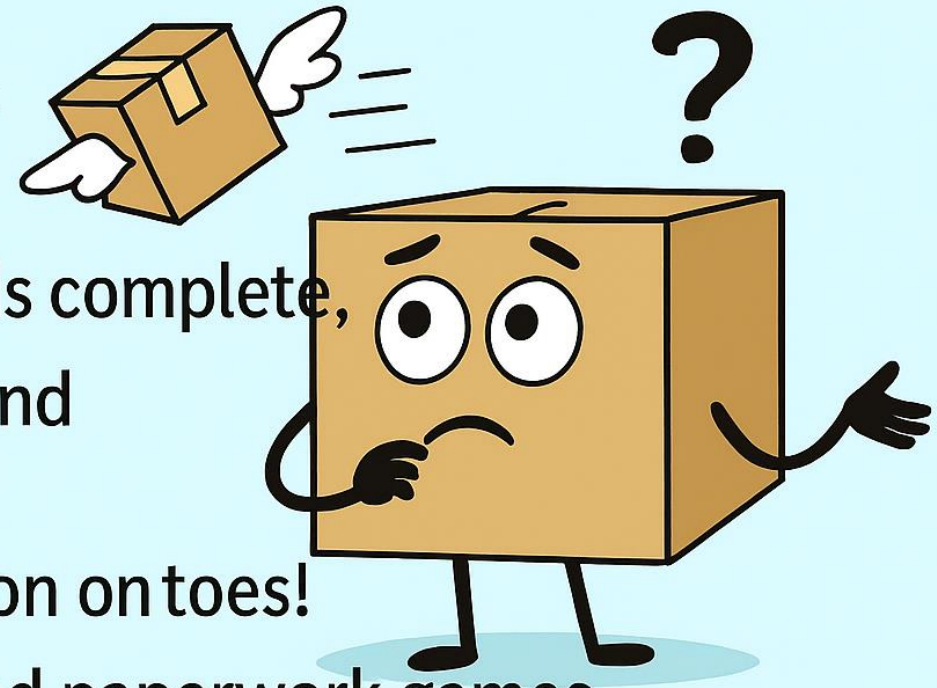
In Summary…

You'd think logistics is
plain and neat,

Send a package it lands complete,

But customs, strikes, and
wondering woes,

Keep us guessing and on on toes!



Through Brexit gifts and paperwork games,
Each shipment writes new tales (and claims).

Yet with teamwork, patience, and a laugh or two,
We find a way to see it through

In logistics, expect the unexpected....

AND ALWAYS KEEP YOUR SENSE OF ADVENTURE!

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Haemoglobinopathy insights from the ~~Abnormal~~ Variant Haemoglobins Programme

Egg Donation and Bone Marrow Transplant

Bianca Olivier

Haemoglobinopathy EQA Lead Scientist

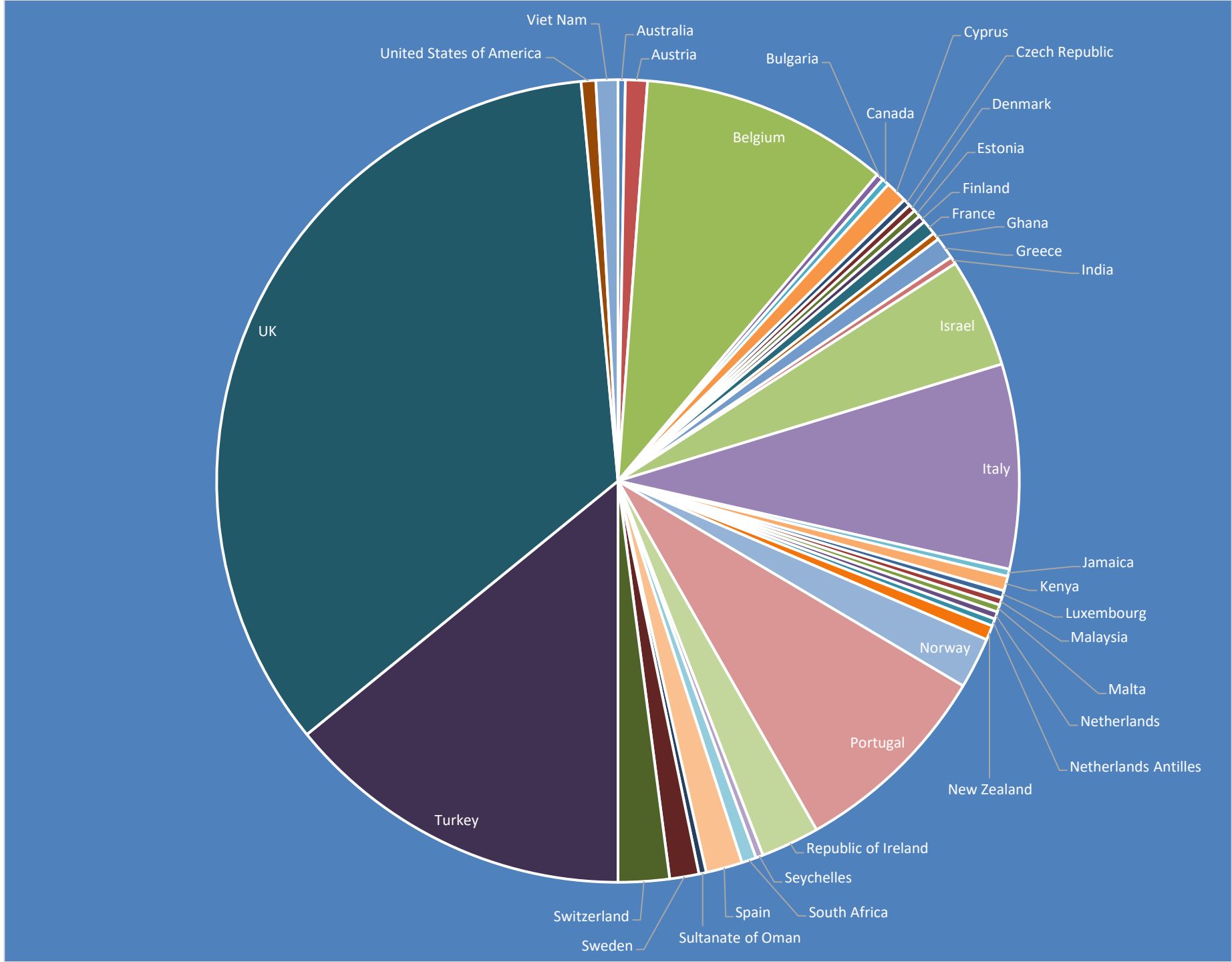
Outline

- Registered Participants
- Why these cases?
- Current NHS/SCT guidelines
- Reporting UKNEQAS results
- Egg Donation cases & Bone Marrow Transplant (BMT) cases
- Next steps for the AH programme

UK NEQAS Participants in AH programme

2504AH (August 2025)	Total
Registered participants	340
Registered instruments	498
UK participants	117
NHS laboratories	109

Number of participants for the 2504AH survey by country



Why these cases?

- Increasing number of patients
- Maternal sample may not represent fetal genetic material in donor-egg pregnancies.
- Bone marrow transplant recipients have haematopoietic DNA that may mask fetal/parental genotypes.
- Clinical implications: missed carrier couples, incorrect referrals and missed high risk pregnancies.

NHS Sickle Cell and Thalassemia guideline

GOV·UK

4.1 Fertility treatment – donor gametes

If the pregnancy was achieved using a donor egg then the screening results on the woman will not be informative. The baby's biological father must be offered testing and, if screen positive, the report must recommend that the fertility clinic is contacted to obtain the biological mother's haemoglobinopathy results.

4.3 Bone marrow transplant (BMT)

Where either biological parent has had a BMT it is likely the results obtained will reflect the BMT donor rather than the biological parent and so will not accurately represent the genetic status of the fetus. If the biological mother has had a BMT, the baby's biological father must be offered testing to make sure this is not a high risk pregnancy. If DNA confirmation of the biological mother's status is required, or if the baby's biological father is post BMT and requires testing, then options that can be considered include:

NHS Sickle Cell and Thalassaemia Screening Programme

Family Origin Questionnaire

If using a pre-printed label please attach one to each copy

H. DON'T KNOW

Adoption/unknown ancestry
Donor egg/sperm (if pregnancy results from donor egg, order test for mother and offer biological father test immediately)
Bone marrow transplant (if mother has had a bone marrow transplant, order test for mother and offer biological father test immediately)

Coded Comments

Expected:

400: No evidence of a haemoglobin variant or thalassaemia

452: Testing the baby's biological father should be offered **or**

453: Testing the baby's biological father should be offered if he is from a high-risk area

Free text comment mentioning the reason for testing the baby's biological father (i.e. Egg Donation or BMT)

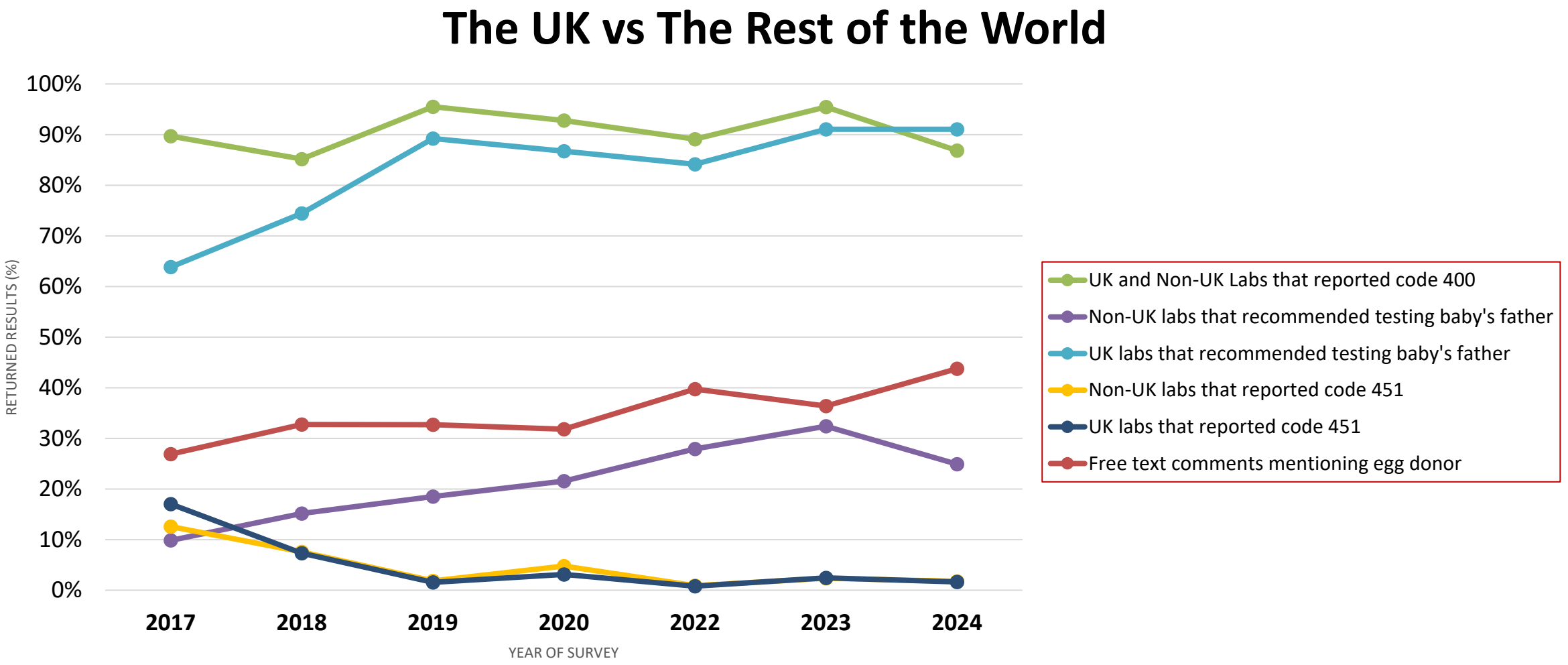
Incorrect Comment:

451: Testing the baby's biological father is **not** required

UK NEQAS Egg Donation Cases

	Year	Survey	Specimen	Case Details
1	2017	1706	AH1	Female, South American, 39 years old
				Pregnant via egg donation
2	2018	1804	AH2	Female, South Asian, 41 years old
				Pregnant via egg donation. Antenatal screening
3	2019	1906	AH3	Female, Russian, 33 years old
				Pregnant via egg donation
4	2020	2005	AH1	Female, Greek Cypriot, 35 years old
				Antenatal screening; pregnant by egg donation
5	2022	2201	AH3	Female, Greek, 38 years old
				Antenatal screening - pregnant using an egg donor
6	2023	2302	AH1	Female, White British, 41 years old
				Antenatal Screening (donor egg pregnancy)
7	2024	2403	AH2	Female. Indian, 40 years old
				Antenatal screening – pregnant by egg donation

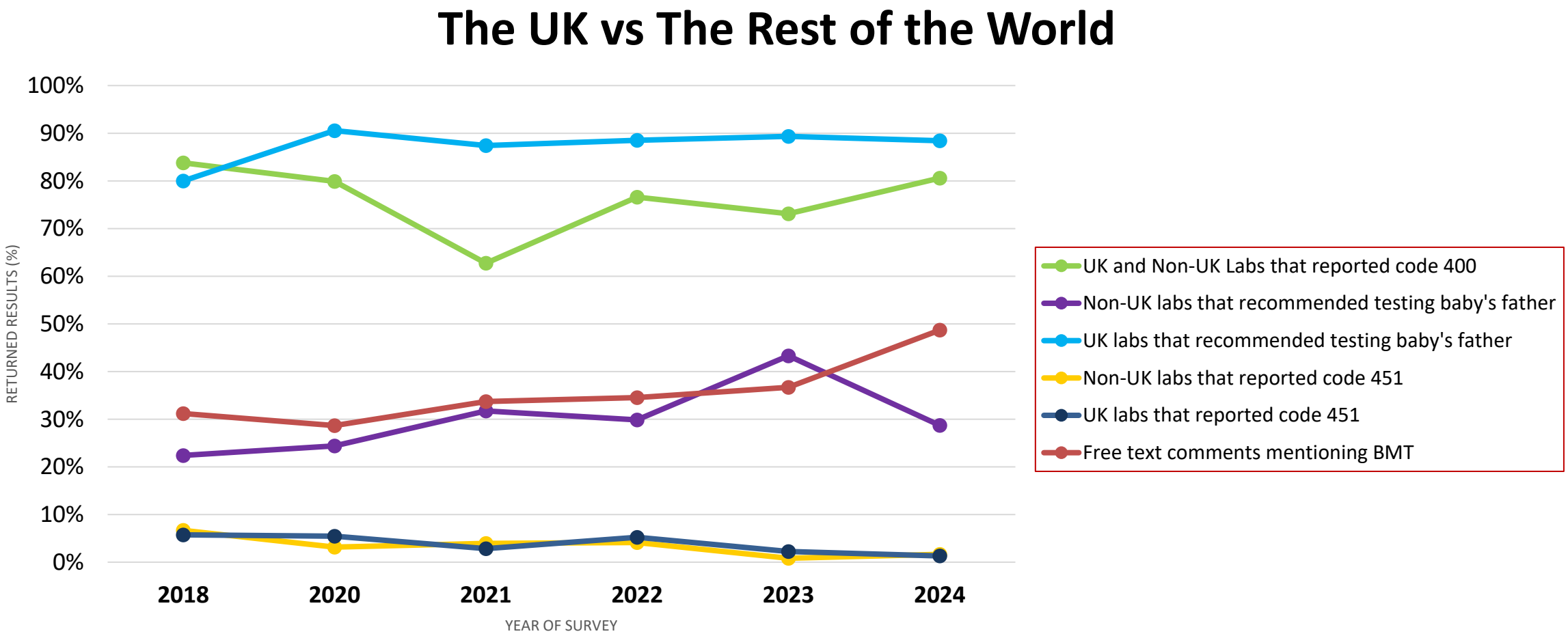
Pregnancies via Egg Donation



UK NEQAS BMT Cases

	Year	Survey	Specimen	Case Details
1	2018	1805	AH2	Female, African, 27 years old
				Antenatal screening. Childhood history of bone marrow transplant
2	2020	2002	AH2	Female, Caucasian, 31 years old
				Antenatal screening. Bone marrow transplant in childhood.
3	2021	2105	AH1	Female, Greek Cypriot, 25 years old
				Antenatal screening. Patient received a bone marrow transplant in childhood.
4	2022	2205	AH2	Female, Cyprus, 36 years old
				Antenatal Screening. Patient had a BMT in childhood.
5	2023	2305	AH2	Female, Greek Cypriot, 29 years old
				Antenatal screening (Had a BMT in childhood for beta thalassaemia major)
6	2024	2406	AH2	Female, Greek Cypriot, 23 years old
				Antenatal screening - patient had a bone marrow transplant in childhood

Antenatal BMT’s



Overall Trends

Code 400 is used in Egg-Donor cases more that BMT cases.

There is more consistency for BMT cases when requesting testing of the baby's biological father.

There is a general decrease in participants using code 451 in both Egg donation and BMT cases for both UK and Non-UK participants.

Appropriate free text comments mentioning that the sample does not represent the genetics of the foetus are on the rise.

The sudden decrease in Non-UK laboratories recommending testing of baby' biological father in 2024 is likely due to new registrations.

Thoughts?

- Are these cases still worth while?
- Should we be sending more or less of these cases?
- Are there other cases you would like us to mimic?

UK NEQAS Stand Come and find me!

Email us: haem@ukneqas.org.uk

Next Steps

- Reviewing our available comments

  “Due to patients' clinical history, these results do not necessarily reflect the genetic status of the baby.”

- Scoring AH interpretive comments

  Interpretation Trial 2 will be sent out in November

- Exploring the possibility of providing more UK specific analysis

  Change takes time

Thank you for listening

UK NEQAS
Haematology

ESR Program

Instrument grouping and performance

UK NEQAS Haematology

Yvonne Hector

Haematology Service Manager

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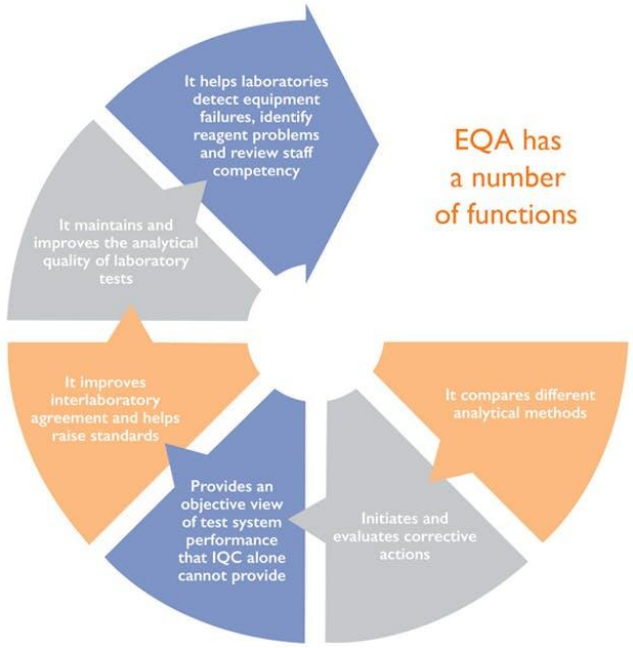
This presentation will cover:

- ❑ The purpose of EQA
- ❑ The importance of Instrument Groups
- ❑ What we consider regarding Instrument Grouping at UK NEQAS

THE PURPOSE OF EQA



- ❑ Quality Assurance
- ❑ Benchmarking
- ❑ Regulatory Compliance
- ❑ Training and Development
- ❑ Detection of Systematic Errors
- ❑ Continuous Improvement
- ❑ Building Trust

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External Quality Assessment

Effective Quality Assurance (QA) requires:

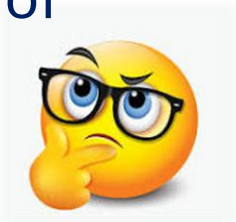
- ✓ **Internal Quality Control (IQC)** - the everyday analytical process of detecting analytical errors within the **lab** to ensure both the reliability and accuracy of test results

- ✓ Participation in **External Quality Assessment (EQA)** programmes - where overall accuracy and comparability of results between labs/ centres may be determined

- ✓ Interlaboratory comparison or EQA / proficiency testing (PT)

THE IMPORTANCE OF INSTRUMENT GROUPS!

How do you keep the groups from turning into a symphony of chaos?



THE IMPORTANCE OF INSTRUMENT GROUPS!

- The material may not be commutable for all parameters
- UK NEQAS works with manufacturers and advisors to monitor instrument grouping
- Ideally, a minimum of twenty instruments is required to form a peer group

THE IMPORTANCE OF INSTRUMENT GROUPS!

- Standardisation: Instrument groups ensure that testing procedures are standardised
- Quality Assurance: laboratories can assess the accuracy and precision of their instruments, helping to maintain high-quality testing standards
- Performance Monitoring: provides a means for laboratories to monitor the performance of their instruments
- Confidence Building: instils confidence in the reliability and accuracy of the instruments' testing capabilities

ESR Programme

- In 2023 the need to re-assess the ESR instrument groups was raised

- [x] BD Seditainer
- [x] Miscellaneous
- [x] Sarstedt Sedivette
- [x] Starrsed
- [x] VES-MATIC
- [x] VES-MATIC CUBE
- [x] Westergren

S-Monovette tube placed in a rack

VS

Manual tube

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ESR Programme

2 options were proposed

Option 1:

- Westergren (automated reader)
- Westergren (manual) – should the different anticoagulants be separated?
- what to do with the 1 Wintrobe tube registered?

Option 2:

- The Westergren method
- Modified Westergren methods
- Alternate ESR Methods

ESR Programme

- In 2024 the proposal was reviewed by a Scheme Advisor

- It was agreed that option 2 was the suitable option in line with the ISLH classification

Option 2:

  - The Westergren method
  - Modified Westergren methods
  - Alternate ESR Methods

ESR Programme

Option 2:

- The Westergren method
- Modified Westergren methods
- Alternate ESR Methods

- Oct 2024: the proposed groups were evaluated at 2303ES, 2304ES, 2401E, 2402ES and 2403ES

2303ES:	**3 out of 429 received a PS >100**	**2 had the same PS pre and post re-grouping**
	24 out of 429 had a difference in PS ranging from 14 to 20	
2304ES:	3 out of 450 received a PS >100	2 had the same PS pre and post re- grouping
	59 out of 450 had a difference in PS ranging from 14 to 31	
2401ES:	5 out of 455 received a PS >100 (3 where previously the score was <100)	2 had a PS >100 pre and post re- grouping where 1 PS had decreased
	50 out of 455 had a difference in PS ranging from 13 to 46	
2402ES:	4 out of 463 received a PS >100	
	52 out of 463 had a difference in PS ranging from 14 to 58	
2403ES:	7 out of 463 received a PS >100	1 had a PS >100 pre and post re- grouping where the PS had decreased
	50 out of 463 had a difference in PS ranging from 14 to 62	

ESR Programme

Option 2:

- The Westergren method
- Modified Westergren methods
- Alternate ESR Methods

❑Nov 2024: the VES-MATIC CUBE series instruments were further re-grouped

Group name			Instrument
Current	**Initial Proposal**	**Secondary Proposal**	
VES-MATIC CUBE series	Modified Westergren method	Modified Westergren method CUBE LINE sub-group1	VES-Matic Cube 30
			VES-Matic Mini Cube
		Modified Westergren method CUBE LINE sub-group2	Cube 30 Touch
			VES-Matic Cube 80
			VES-Matic Cube 200
			VES MATIC 5
			Cube 30 Touch

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	Westergren	Modified Westergren	Ves CL (subgroup 1 and 2)
2401ES	I out of 105 received a PS >100 (the PS decreased to <100 post re-grouping)	0 out of 286 received a PS >100	0 out of 61 received a PS >100
	3 out of 105 had a difference in PS ranging from 14 to 20	32 out of 286 had a difference in PS ranging from 14 to 58	1 out of 61 had a difference in PS of 15
2402ES	0 out of 108 received a PS >100	1 out of 289 received a PS >100 (the PS was the same pre re-grouping)	0 out of 61 received a PS >100
	11 out of 108 had a difference in PS ranging from 15 to 20	36 out of 289 had a difference in PS ranging from 14 to 58	5 out of 61 had a difference in PS ranging from 14 to 17
2403ES	0 out of 109 received a PS >100	4 out of 293 received a PS >100 (3 had a PS <100 pre-regrouping)	0 out of 60 received a PS >100
	11 out of 109 had a difference in PS ranging from 15 to 26	38 out of 293 had a difference in PS ranging from 14 to 58	0 out of 60 had a difference in PS of >14

Summary

Option 2:

- The Westergren method
- Modified Westergren methods
- Alternate ESR Methods

It was noted that:

re-grouping the instruments into 3 groups; Westergren, Modified Westergren and Alternate ESR Methods resulted in

- ❑ 0 performance score (PS) decreased
- ❑ 15 PS increased
- ❑ 4 PS remained the same

Summary

Option 2:

- The Westergren method
- Modified Westergren methods
- Modified Westergren methods – Cube Line 1
- Modified Westergren methods – Cube Line 2
- Alternate ESR Methods

Further re-grouping into 5 groups resulted in

- ❑ 2 PS decreased
- ❑ 3 PS increased
- ❑ 1 PS remained the same

BENEFITS OF THE CHANGE

Fairer participant comparisons

Consistency across instruments

Increased confidence in scheme data

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